

Value Creator
SOLU M
(주) 솔루엠

www.solu-m.com

Introduce of SOLUM (주)솔루엠

설립	2015. 07. 02	본사	경기도 용인시 용인테크노밸리 A동
매출	10,765억원 (2020년)	제품	파워모듈, IOT, Electronic Shelf Label
사업장	- 4개 법인 (중국동관, 베트남 하노이, 멕시코, 인도) - S/W센터 (인도), 2개 판매법인(미주, 유럽) - 4개 사무소 (대만, 중국_북경, 일본, 미국_뉴저지)		
연혁	- 1983 삼성전기 파워사업 시작 - 1984 FPD(TV,모니터),PC/VTR파워 사업 - 2008 LED 조명 시장 진입_삼성전자 LED社 2010 LED 조명 전원 미주 진입_ 미주 Tier -1 거래선 - 2015.09 삼성전기 --> 솔루엠 Spin off 2015.10 기업 부설 Power 연구소 2015.12 벤체기업 인증획득 2016.03 기업부설 중앙연구소/스마트 솔루션 연구소 인증 - 2016.07 KS인증 취득 (중국 동관 솔루엠) 2016.12 베트남 공장 가동 - 2017.01. KS인증 이관 (중국 솔루엠 --> 베트남 솔루엠) - 내장형 : 10초과 30W이하, 30W초과 60W이하, 60W초과 100W이하 - 독립형 : 10초과 30W이하, 30W초과 60W이하, 60W초과 100W이하, 100W초과 300W이하 - 2017.05. 신사옥 이전 (수원 삼성전기 --> 용인 테크노 밸리) 2017.06 신기술 개발 우수기업 정부시상 - 2018.06 신기술 개발 우수기업 정부시상 - 2021.02 기업공개 (유가증권 상장등록) 2021.10 신기술 개발 우수 기업 전부 시상 (국무총리상)		

제품인증

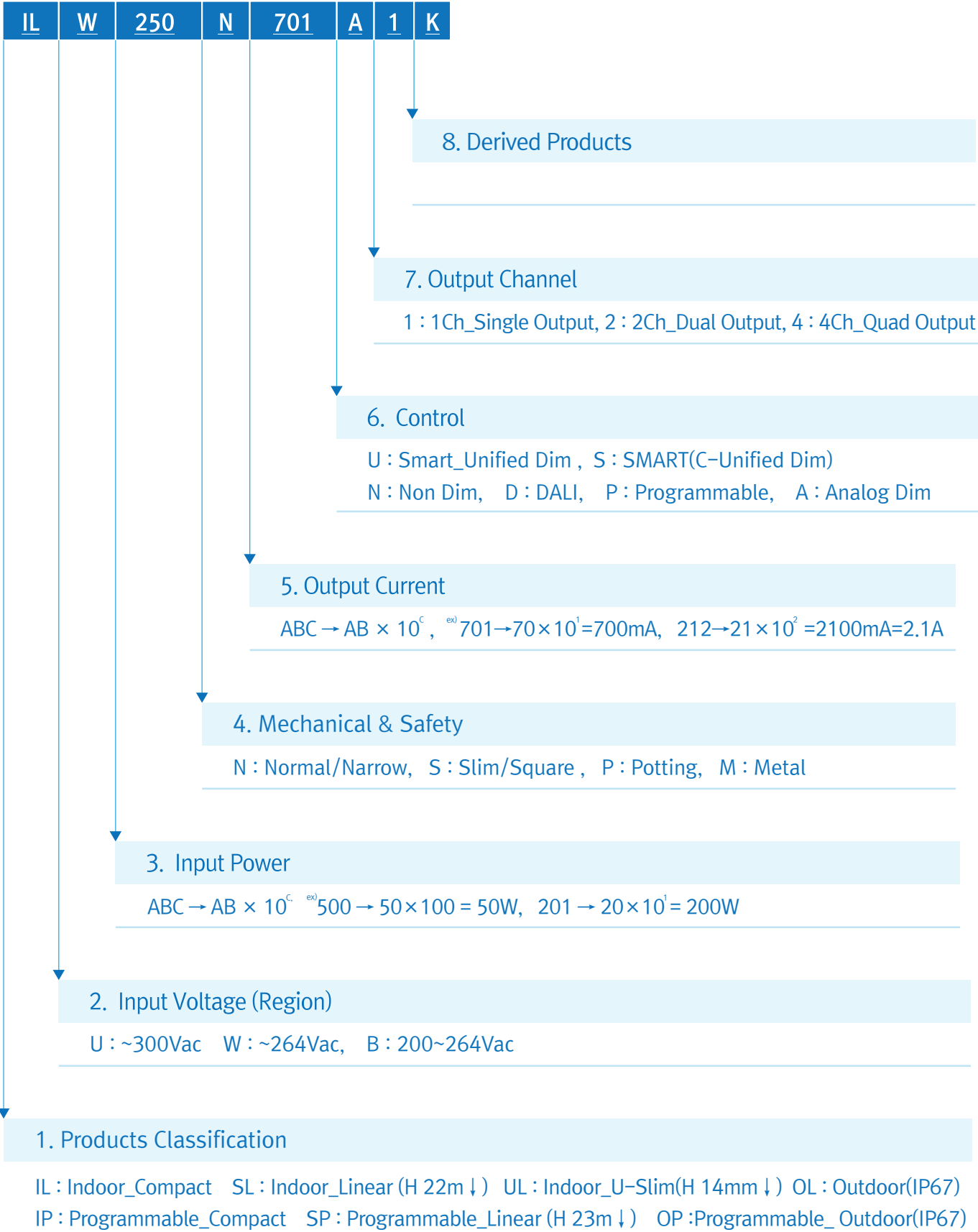


규격 시험소 인증



STD Products Line up

Method of Naming Model



Platform Line up Strategy

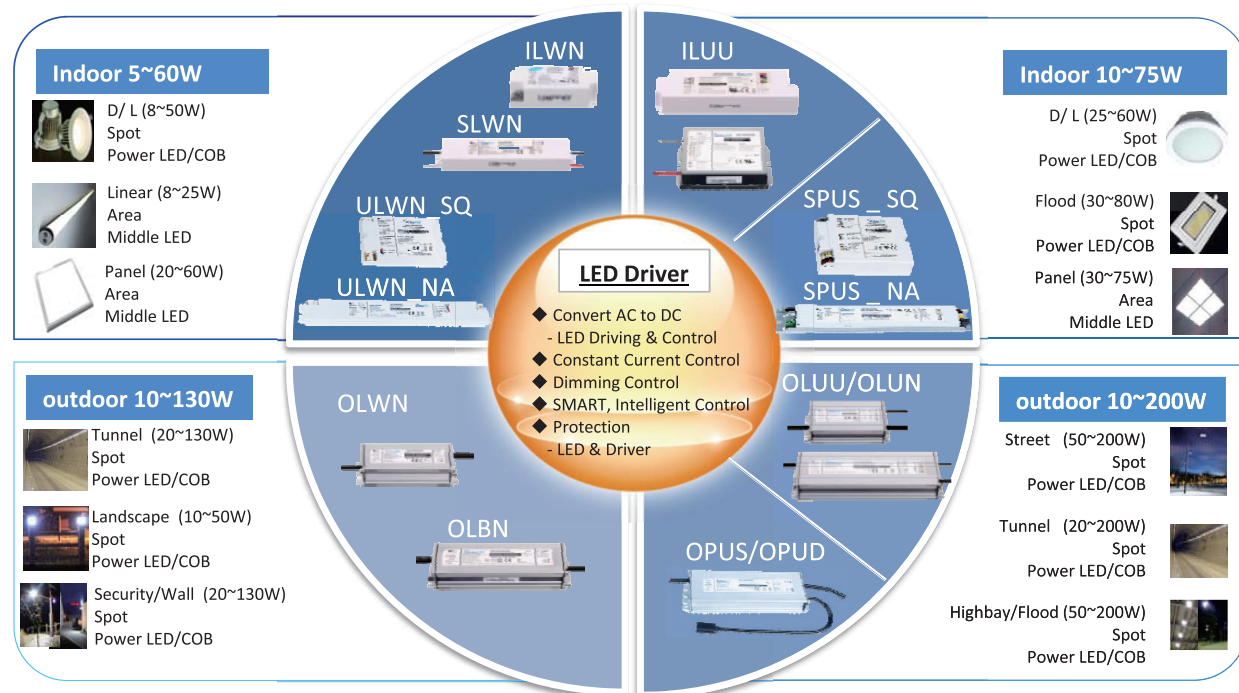
Chracteristics of Platform

Platform I

- For Replace Traditional Lighting
- products differentiation
 - Flicker-less : Output CurrentRipple_5% ↓
 - High Density : Small Size
 - High Efficiency : 89%@40W ↑
 - High PF : 95% ↑ , Very Low THD : 10% ↓
 - High Stability for Sugre(4/8KV ↑) & AC Noise
 - Low Power Dissipation @ No Load : 0.5~1.0W ↓
 - CLASSII _ Reinforced Insulation

Platform II

- For SMART Lighting Control
- products differentiation
 - Flicker-less : Output Current Ripple _ 5% ↓
 - High Density : Small Size
 - Unified dim : Easy Connected With SAMRT Module
 - Various Control : 12Vdc, AOC_Rset, Dim to off, LED-off
 - High Stability for Sugre(4/8KV ↑) & AC Noise
 - Low Power Dissipation @ LED-Off : 0.25W ↓
 - CLASSII _ Reinforced Insulation



Non-dim		Dim & R-set Programmable		IoT & GUI Programmable	
Flicker-free (No AC Ripple)_2stage		Flicker-free (No AC Ripple)_3Stage Dim(0~10), STBY(0.5W), Aux, fault Detection		Flicker-free (No AC Ripple)_3Stage Digital Interface, STBY(0.5W), Aux, Fault & Monitoring	
ILWN	Indoor /Flicker-less Non-Dim Compact (H 32mm ↓)	ILUU (NA)	Indoor /Flicker-less Uni-Dim / 120~277Vac Compact (H 32mm ↓)	SPUS (NA)	Indoor /Flicker-less /Programmable C-Uni-Dim / 120~277Vac Compact (H 22mm ↓)
SLWN	Indoor /Flicker-less Non-Dim Slim (H 22mm ↓)	ILUU (SQ)	Indoor /Flicker-less Uni-Dim / 120~277Vac Compact (H 32mm ↓)	SPUS (SQ)	Indoor /Flicker-less /Programmable C-Uni-Dim / 120~277Vac Compact (H 22mm ↓)
ULWN (SQ)	Indoor /Flicker-less Non-Dim U-Slim (H 14mm ↓)	OLUU	Outdoor /Flicker-less Uni-Dim / 120~277Vac IP67 /Independent	OPUS	Outdoor /Flicker-less /Programmable C-Uni -Dim/ 120~277Vac IP67 /Independent
ULWN (NA)	Indoor /Flicker-less Non-Dim U-Slim (H 14mm ↓)	OLUN	Outdoor /Flicker-less Non-Dim / 120~277Vac IP67 /Independent	OPUD	Outdoor /Flicker-less /Programmable DALI2.0/ 120~277Vac IP67 /Independent
OLWN	Outdoor /Flicker-less Non-Dim IP67 /Independent	OLUD	Outdoor /Flicker-less Dim / 120~277Vac IP67 /Independent		

Products Differentiation

Flicker Free Driver

Flicker free _ No AC ripple current

Flicker	Health Effect	Source : IEEE Standard P1789
주파수	인체 영향	빈도
Visible	노출즉시 발작, 신경질환 두통, 현기증	발작 (1/4000명)
Invisible	20분이상 노출시 두통, 현기증, 안구피로	두통피로 35%@100Hz

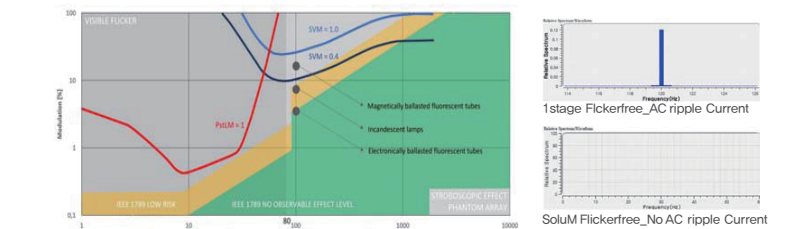
플리커 (Flicker) 스트로보스코픽 효과 (Stroboscopic effect) 팬텀 배열 현상 (Phantom array effect)



- 현 상 : 빛의 주기적 깜빡임으로 시각신경에 영향
- 원 인 : LED에 인가되는 전류가 주기적으로 변화 (AC주파수)
→ DC 전류 인가시 조명의 주기적 변화 제거
- 차별화 : 2Stage 1 제어 방식으로 AC 주기의 영향없는 DC공급
→ Flicker Free, 전원 노이즈 (전열기/모터...)내성, 낙뢰

Flicker 측정기준 (TLA)

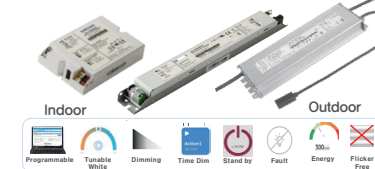
Index	Definition	Limit	Refer ence
PstLM	short-termLight Modulation Visible Flicker (0.3 ~80Hz)	<1.0	IEC/TR61547-1 IEC 61000-4-15
SVM	Stroboscopic Visibility Measure	<0.4	IEC/TR 61547-1 IEC61000-3-3 IEC61000-4-15



Smart Light Solution_Gen2

Electric Control Gear

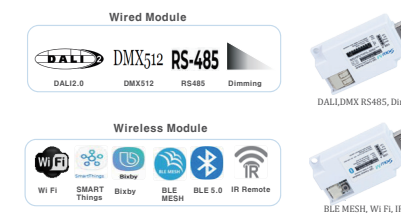
- AC 120~277VAC / 50~60Hz
- Flicker Free & STBY (0.5W ↓) _ 3Stage
- GUI Programmable & Digital Interface
- Status Monitoring & Power Metering



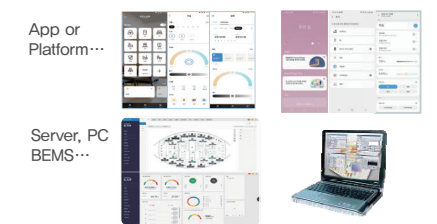
Interface & 3rd Party



SMART Control Module

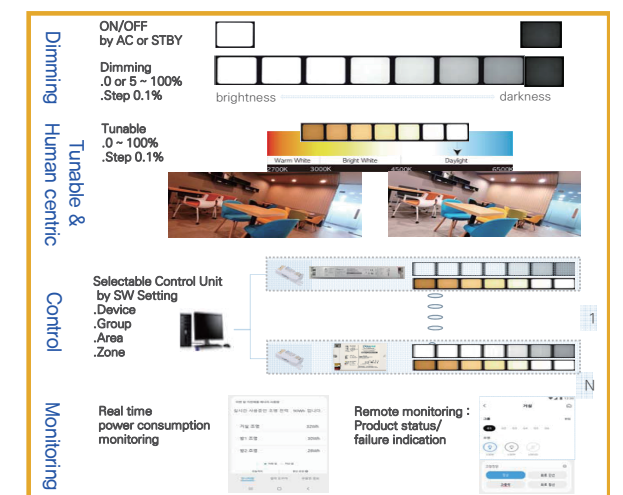
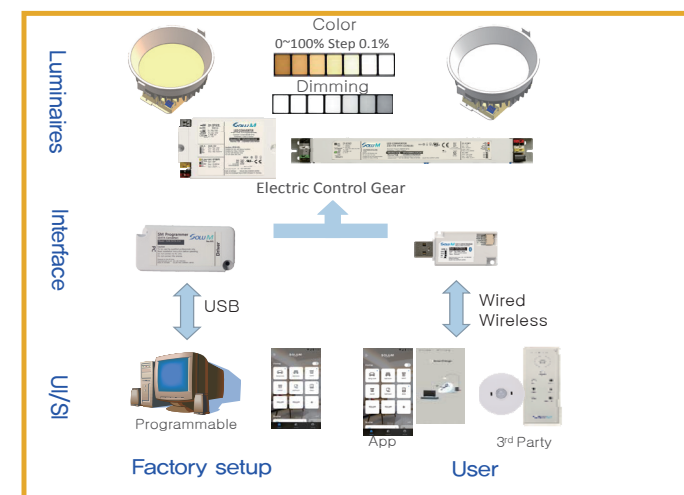


User Setup & Control



SMART Driver & Digital Interface

1. Manufacturer _ Programmable Factory Setup (variable output, function)
2. User_ Communication module (set up & control user interface)



Production Differentiation

Wireless

Home & Commercial & Factory IoT Light

Device : ECG(SPUS+OPUS) + BLE MESH
UI / SI : App + RCU(BLE MESH)



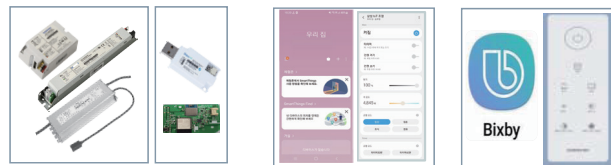
Building IoT Light (for SAMSUNG)

Device : ECG(SPUS+OPUS) + BLE MESH + Gateway (Ethernet)
UI / SI : b.lot (SAMSUNG) , App + RCU (BLE MESH)



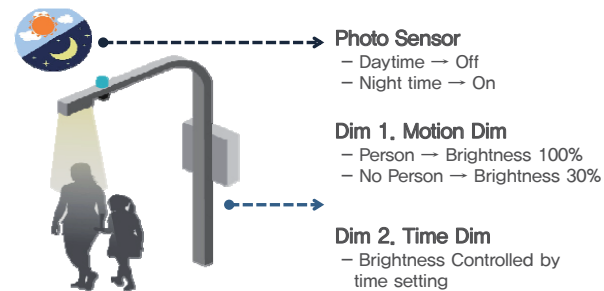
SmartThings (for SAMSUNG)

Device : ECG(SPUS+OPUS) + SmartThings_Wi-Fi
UI / SI : SmartThings (SAMSUNG) + RCU (ESB)

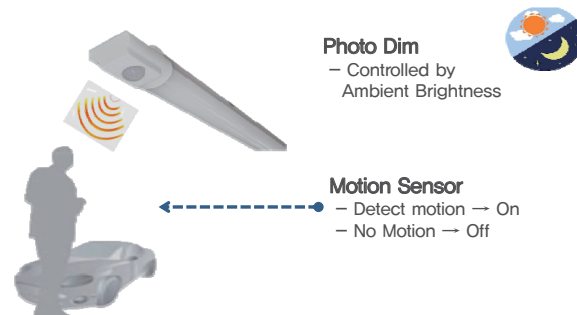


Intelligent

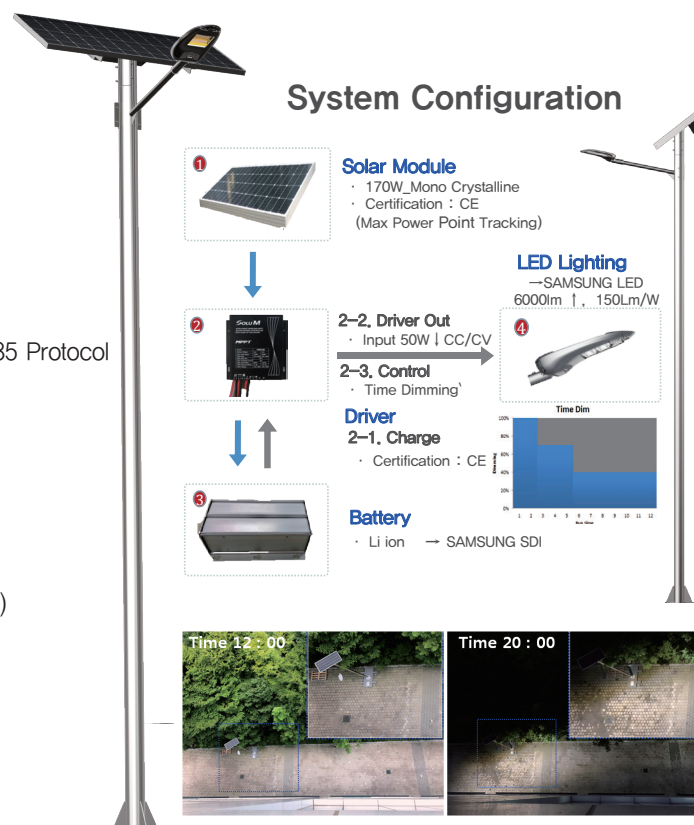
Case 1 : 실외용 보안등



Case 2 : 센서등



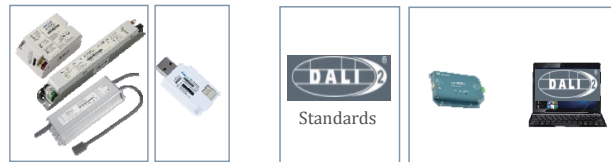
Solar Street Light



Wired

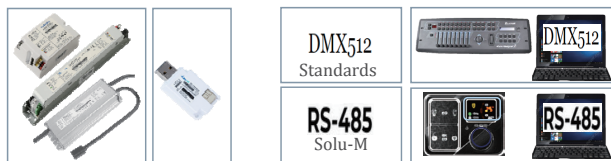
DALI2.0 for Standard DALI System

Device : ECG(SPUS+OPUS) + DALI2.0 or ECG (OPUD)
UI / SI : Compatible Standard DALI System



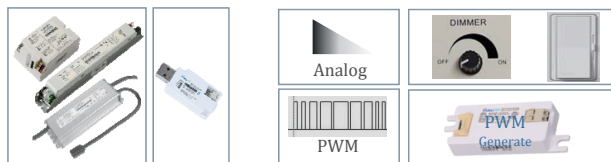
DMX Standard or RS-485_SoluM

Device : ECG(SPUS+OPUS) + DMX or SoluM RS485
UI / SI : Compatible Standard DMX System or SoluM RS-485 Protocol



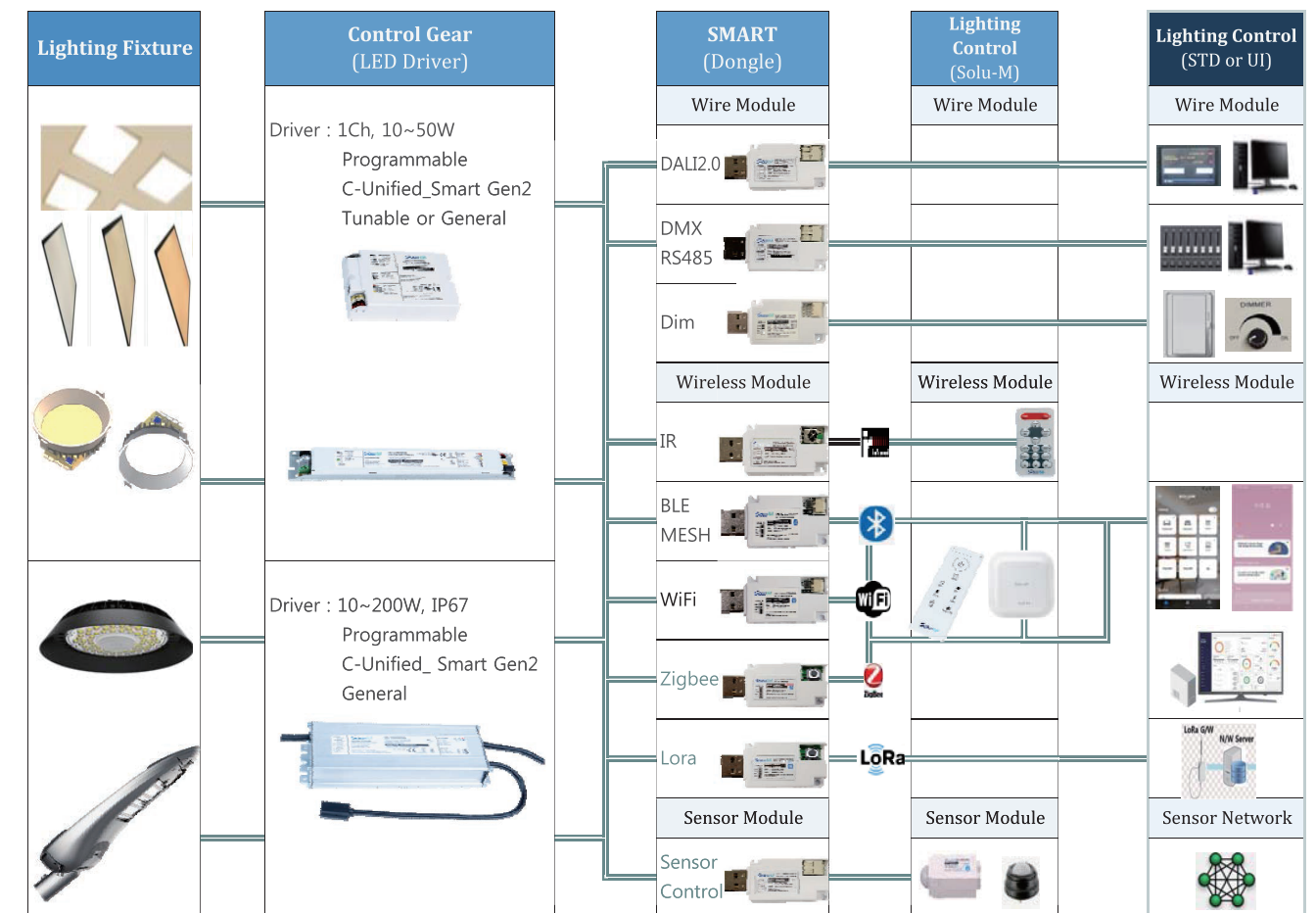
Dim & Tunable

Device : ECG(SPUS+OPUS) + Dim (Dimming & Color control)
UI / SI : General Dimmer or PWM Controller

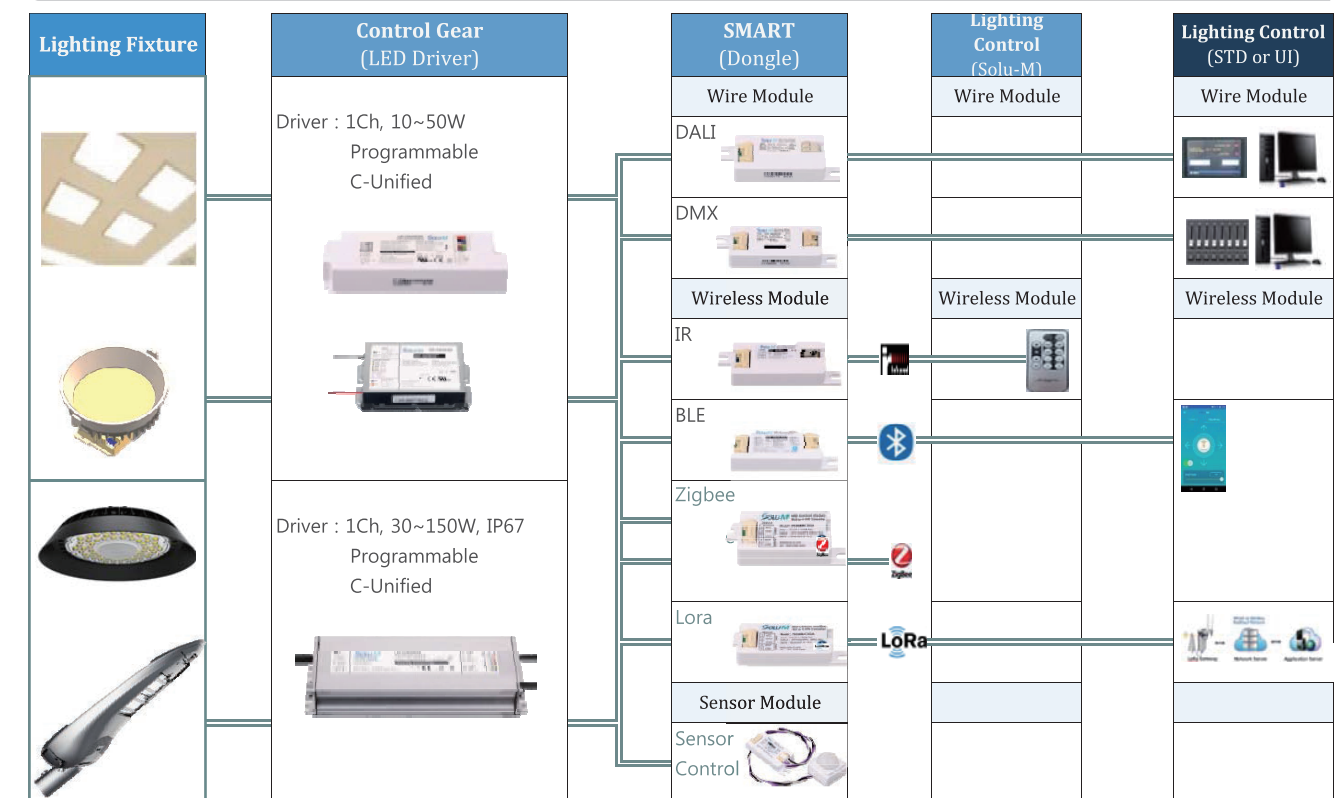


Production Differentiation

SMART Lighting Application _ C-Unified Dim (Smart Gen2)



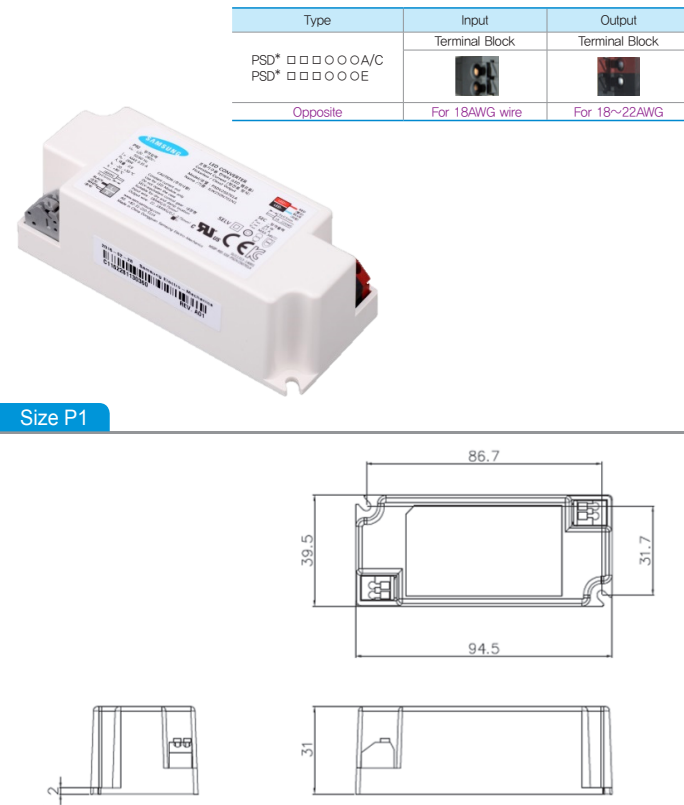
SMART Lighting Application _ Unified Dim (Smart Gen1)



ILWN Series_Platform I

Compact, Fixed/Non-Dim, Flickerfree(No AC ripple current)

- CCCV (Constant Current & Constant Voltage)
- Flickerless : FI ≤ 0.01 ,%F $\leq 5\%$ (@800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- High Density Power (Compact Size)
 - P1_Dimension : 94.5(L) * 39.5(W) * 31.0(H)
- Low Power Dissipation @ No Load : 0.7W ↓
 - Applied EU No 1194_2014.09 : 1.0W ↓
- High Performance
 - High Efficiency : Up to 83~89%
 - High PF (90% ↑), Low THD (10% ↓)
 - Wide Vout : $\pm 30\%$ LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 80°C
- High Surge Immunity
 - L-L 4KV ↑, L-FG 8KV ↑
- Classification : Class II
 - No Leakage Current : Line - FG



Size P1

Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
ILW110N241N1	PSDV110241C			240	25	40	90	264	12	6	10	82	●							CB,CE,KC,KS,UL	P1
ILW130N281N1	PSDV130281A			285	25	40	90	264	14	7	12	83	●							CB,CE,KC,KS,UL	P1
ILW130N281N1M	PSDV130281M																			CB,CE,KC,KS	
ILW160N351N1	PSDV160351A			350	25	40	90	264	18	8	15	84	●							CB,CE,K-C,KS,UL,BIS	P1
ILW160N351N1M	PSDV160351M																			CB,CE,KC,KS	
ILB200N421N1	PSDH200421C			420	23	40	198	264	21	9	18	84	●							CB,CE,KC,KS	P1
ILW170N571N1C	PSDV170571C			570	15	25	99	264	18	8	15	85	●							CB,CE,UL (KC컨버터 외장형)	P1
ILW170N571N1E	PSDV170571E																			CB,CE,KC,KS,UL	
ILW220N571N1	PSDV220571A			570	23	34	99	264	24	12	20	86	●							CB,CE,KC,KS,UL	P1
ILW270N571N1	PSDV270571A			570	23	40	99	264	28	12	24	87	●							CB,CE,UL (KC컨버터 외장형)	P1
ILW270N571N1E	PSDV270571E																			CB,CE,KC,KS,UL	
ILW200N701N1	PSDV200701A			700	15	25	99	264	22	10	18	85	●							CB,CE,K-C,KS,UL,CCC	P1
ILW250N701N1	PSDV250701A			700	23	34	108	264	29	15	25	86	●							CB,CE,KC,KS,UL	P1
ILB400N701N1	PSDH400701A			700	27	50	198	264	42	18	37	88	●							CB,CE,KC,KS,BIS	P1
ILB450N801N1	PSDH450801C			800	27	50	198	264	47	21	42	89	●							CB,CE,KC,KS	P1
ILB420N901N1	PSDH420901A			900	23	40	198	264	42	20	38	89	●							CB,CE,KC,KS	P1
ILB440N901N1	PSDH440901A			900	23	43	198	264	46	20	41	89	●							CB,CE,KC,KS	P1
ILB470N102N1	PSDH470102A			1050	23	40	198	264	50	23	44	89	●							CB,CE,KC,KS	P1
ILB510N102N1	PSDH510102A			1050	23	43	198	264	53	23	47	89	●							CB,CE,KC,KS	P1

SLWN Series_Platform I

Linear, Fixed/Non-Dim, Flickerfree(No AC ripple current)

- CCCV (Constant Current & Constant Voltage)
- Flickerless : FI ≤ 0.01 ,%F $\leq 5\%$ (@800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- High Density Power (Slim_Narrow Size)
 - P2_Dimension : 186(L) * 31.0(W) * 22.0(H)
- Low Power Dissipation @ No Load : 0.4W ↓
 - Applied EU No 1194_2016.09 : 0.5W ↓
- High Performance
 - High Efficiency : Up to 85~90%
 - High PF (90% ↑), Low THD (10% ↓)
 - Wide Vout : $\pm 30\%$ LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 80°C/85°C
- High Surge Immunity
 - L-L 4KV ↑, L-FG 8KV ↑
- Classification : Class II
 - No Leakage Current : Line - FG



Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
SLW100N181N1A	PSNV100181A/C PSNV100181B/D			180	23	45	90	275	10	4	9	85	●							CB,CE,KC,KS (LH 표준)	P2
SLW170N571N1A	PSNV170571A/C PSNV170571B/D			570	19	26	90	275	18	10	16	87	●							CB,CE,KC,KS,CCC	P2
SLW170N571N1E	PSNV170571E/G PSNV170571F/H			570	19	26	90	275	18	10	16	87	●							CB,CE,CCC (KC컴버터 외장형)	P2
SLW230N421N1A	PSNV230421A/C PSNV230421B/D			420	23	50	90	275	25	9	22	87	●							CB,CE,KC,KS	P2
SLW240N441N1A	PSNV240441A/C PSNV240441B/D			440	23	50	90	275	27	10	23	87	●							CB,CE,KC,KS (LH 표준)	P2
SLW320N571N1A	PSNV320571A/C PSNV320571B/D			570	23	50	90	275	34	12	30	88	●							CB,CE,KC,KS,PSE	P2
SLW320N571N1E	PSNV320571E/G PSNV320571F/H			570	23	46	90	275	31	12	28	88	●							CB,CE,BIS,PSE (KC컴버터 외장형)	P2
SLB350N621N1A	PSNH350621A/C PSNH350621B/D			620	23	50	180	275	37	14	33	88	●							CB,CE,KC,KS (LH 표준)	P2
SLB400N701N1A	PSNH400701A/C PSNH400701B/D			700	23	50	180	275	41	15	37	89	●							CB,CE,KC,KS	P2
SLB450N801N1A	PSNH450801A/C PSNH450801B/D			800	23	50	180	275	47	17	42	90	●							CB,CE,KC,KS,CCC (LH 표준)	P2
SLB520N901N1A	PSNH520901A/C PSNH520901B/D			900	23	50	180	275	53	20	47	90	●							CB,CE,KC,KS	P2
SLB460N102N1A	PSNH460102A/C PSNH460102B/D			1050	18	38	180	275	47	18	42	89	●							CB,CE,KC,KS	P2
SLB470N102N1A	PSNH470102A/C PSNH470102B/D			1000	18	40	180	275	47	17	42	89	●							CB,CE,KC,KS (LH 표준)	P2
SLB530N122N1A	PSNH530122A/C PSNH530122B/D			1200	18	38	180	275	54	21	48	89	●							CB,CE,KC,KS	P2
SLB600N132N1A	PSNH600132A/C PSNH600132B/D			1350	18	38	180	275	61	23	54	89	●							CB,CE,KC,KS	P2

ULWN_SQ Series_Platform I

U-Slim / Square, Fixed/Non-Dim, Flickerfree(No AC ripple current)

Patent Application

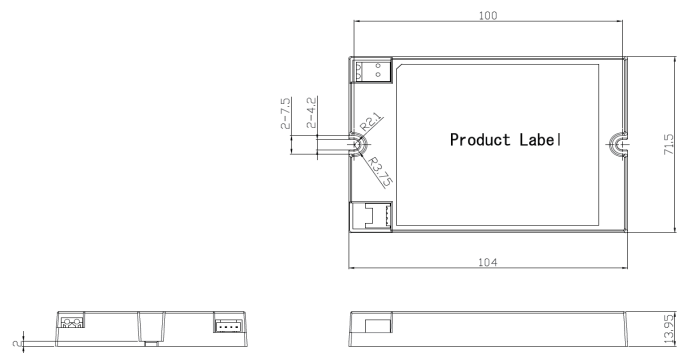
- **CCCV** (Constant Current & Constant Voltage)
- **Flickerless** : FI $\ll$ 0.01 , %F $\ll$ 5% (@800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- **High Density Power (U-slim_Square&Narrow Size)**
 - P3_Dimension : 104(L) * 71.5(W) * 13.9(H)
 - P4_Dimension : 258(L) * 31.5(W) * 13.9(H)
- **Low Power Dissipation @ No Load** : 0.4W ↓
 - Applied EU No 1194_2016.09 : 0.5W ↓
- **High Performance**
 - High Efficiency : Up to 85~90%
 - High PF (90% ↑), Low THD (10% ↓)
 - Wide Vout : $\pm$ 30% LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 85°C
- **High Surge Immunity**
 - L-L 4KV ↑, L-FG 8KV ↑
- **Classification : Class II**
 - No Leakage Current : Line - FG 



Type	Input	Output
PSQ* □□□□□□A/C	Terminal Block	SMW 200-04
Opposite	For 18AWG wire	SMH 200-04



Size P3



ULWN_NA Series_Platform I

U-Slim / Narrow, Fixed/Non-Dim, Flickerfree(No AC ripple current)

Patent Application

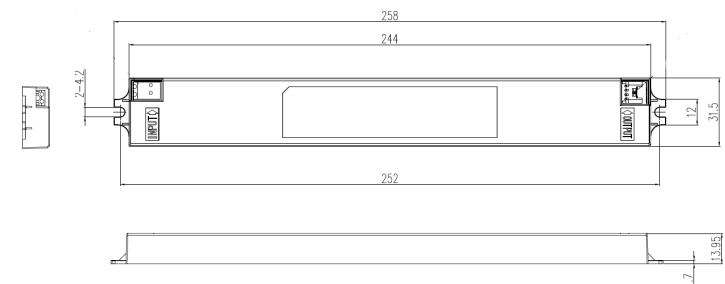
- **CCCV** (Constant Current & Constant Voltage)
- **Flickerless** : FI $\ll$ 0.01 , %F $\ll$ 5% (@800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- **High Density Power (U-slim_Square&Narrow Size)**
 - P3_Dimension : 104(L) * 71.5(W) * 13.9(H)
 - P4_Dimension : 258(L) * 31.5(W) * 13.9(H)
- **Low Power Dissipation @ No Load** : 0.4W ↓
 - Applied EU No 1194_2016.09 : 0.5W ↓
- **High Performance**
 - High Efficiency : Up to 85~90%
 - High PF (90% ↑), Low THD (10% ↓)
 - Wide Vout : $\pm$ 30% LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 80°C
- **High Surge Immunity**
 - L-L 4KV ↑, L-FG 7KV ↑
- **Classification : Class II**
 - No Leakage Current : Line - FG 



Type	Input	Output
PSJ* □□□□□□A/C	Terminal Block	SMW 200-04
Opposite	For 18AWG wire	SMH 200-04



Size P4



Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
ULW130S281N1A	PSQV130281A/D			280	23	45	108	275	16	6	13	83	●							CB,CE,KC,KS	P3
ULW180S351N1A	PSQV180351A/D			350	23	45	108	275	20	7	17	85	●							CB,CE,KC,KS	P3
ULW240S441N1A	PSQV240441A/D			440	25	50	108	275	27	10	23	87	●							CB,CE,KC,KS	P3
ULW320S571N1A	PSQV320571A/D			570	25	50	108	275	34	14	30	87	●							CB,CE,KC,KS	P3
ULB350S621N1A	PSQH350621A/D			620	25	50	180	275	37	15	33	88	●							CB,CE,KC,KS	P3
ULB400S701N1A	PSQH400701A/D			700	25	50	180	275	41	17	37	89	●							CB,CE,KC,KS	P3
ULB450S801N1A	PSQH450801A/D			800	25	50	180	275	47	19	42	89	●							CB,CE,KC,KS	P3
ULB520S901N1A	PSQH520901A/D			900	25	50	180	275	53	21	47	89	●							CB,CE,KC,KS	P3
ULB470S102N1A	PSQH470102A/D			1000	18	40	180	275	47	17	42	89	●							CB,CE,KC,KS	P3
ULB550S122N1A	PSQH550122A/D			1200	18	40	180	275	57	21	50	89	●							CB,CE,KC,KS	P3

Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
ULW130N281N1A	PSJV130281A/D			280	23	45	108	275	16	6	13	83	●							CB,CE,KC,KS	P4
ULW180N351N1A	PSJV180351A/D			350	23	45	108	275	20	7	17	85	●							CB,CE,KC,KS	P4
ULW240N441N1A	PSJV240441A/D			440	25	50	108	275	27	10	23	87	●							CB,CE,KC,KS	P4
ULW320N571N1A	PSJV320571A/D			570	25	50	108	275	34	14	30	87	●							CB,CE,KC,KS	P4
ULB350N621N1A	PSJH350621A/D			620	25	50	180	275	37	15	33	88	●							CB,CE,KC,KS	P4
ULB400N701N1A	PSJH400701A/D			700	25	50	180	275	41	17	37	89	●							CB,CE,KC,KS	P4
ULB450N801N1A	PSJH450801A/D			800	25	50	180	275	47	19	42	89	●							CB,CE,KC,KS	P4
ULB520N901N1A	PSJH520901A/D			900	25	50	180	275	53	21	47	89	●							CB,CE,KC,KS	P4
ULB470N102N1A	PSJH470102A/D			1000	18	40	180	275	47	17	42	89	●							CB,CE,KC,KS	P4
ULB550N122N1A	PSJH550122A/D			1200	18	40	180	275	57	21	50	89	●							CB,CE,KC,KS	P4

ILUU Series_Platform II –Smart Gen1

Compact, Rset, Unified Dim for SMART Control, STBY, Flickerfree(No AC ripple current)

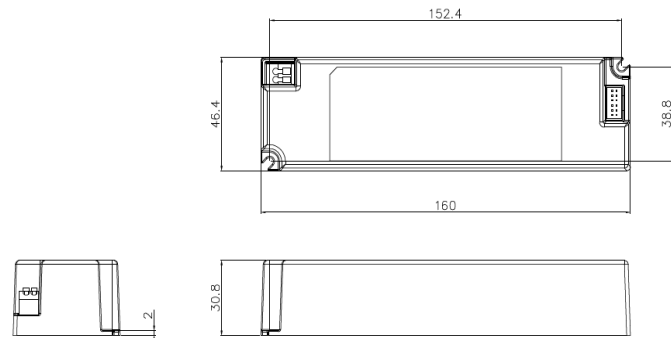
- **CCCV** (Constant Current & Constant Voltage)
- **Flickerless** : FI ≤ 0.01 ,%F $\leq 5\%$ (@800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- **High Density Power (Compact&Square Size)**
 - Q1_Dimension : 160(L) * 46.4(W) * 30.8(H)
 - M1_Dimension : 120(L) * 75.4(W) * 30.6(H)
- **Low Stand by Power Dissipation** : 0.25W ↓
 - Applied Eco Design & Energy star : 0.5W ↓
- **Unified Dim for SMART Control**
 - Dim(0–10V), Remote, Vcc, Status Monitoring
 - AOC_Adjustable Output Current , Deep Dimming ~5%
- **High Performance**
 - High Efficiency : Up to 88~92%
 - High PF (90% ↑), Low THD (20% ↓)
 - Wide Vin : 108~305VAC
 - Wide Vout : $\pm 30\%$ LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 80°C
- **High Surge Immunity**
 - L-L 4KV ↑, L-FG 8KV ↑
- **Classification : Class II**
 - No Leakage Current : Line – FG



Type	Input	Output
PSD* □□□□□□A/D	Wire 18AWG	SMW200–12C
	Opposite	Wire 18AWG ILUU 12pin Cable_SN170420



Size Q1

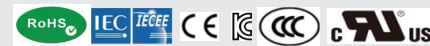


Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
ILU400N701U1A	PSDV400701A/D		500	700	25	50	108	305	47	12	39	86	●	5%		●	●	●	CB,CE,KC, KS UL Class2	Q1	
ILU550N102U1A	PSDV550102A/D		700	1050	25	46	108	305	62	17	53	88	●	5%		●	●	●	CB,CE,KC, KS UL Class2	Q1	
ILU600N102U1A	PSDV600102A/D			1050	32	50	99	305	62	32	55	89	●	5%		●			CB,CE,KC, KS UL Class2	Q1	
ILU700N142U1A	PSDV700142A/D		1050	1400	25	43	108	305	75	25	66	89	●	5%		●	●	●	CB,CE,KC,KS,C- CC UL Class2	Q1	

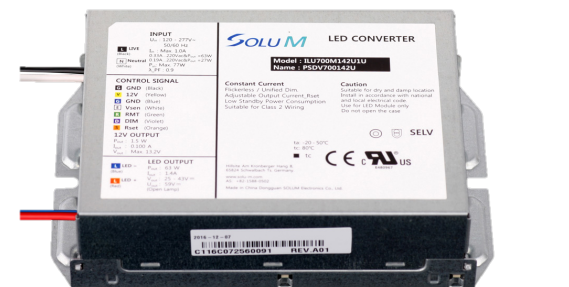
ILUU Series_Platform I

Square & Metal, Rset, Unified Dim for SMART Control, STBY, Flickerfree(No AC ripple current)

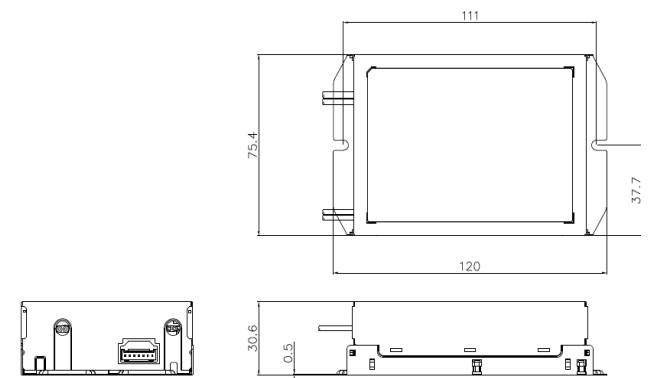
- **CCCV** (Constant Current & Constant Voltage)
- **Flickerless** : FI ≤ 0.01 ,%F $\leq 5\%$ (@800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- **High Density Power (Compact&Square Size)**
 - Q1_Dimension : 160(L) * 46.4(W) * 30.8(H)
 - M1_Dimension : 120(L) * 75.4(W) * 30.6(H)
- **Low Stand by Power Dissipation** : 0.25W ↓
 - Applied Eco Design & Energy star : 0.5W ↓
- **Unified Dim for SMART Control**
 - Dim(0–10V), Remote, Vcc, Status Monitoring
 - AOC_Adjustable Output Current , Deep Dimming ~5%
- **High Performance**
 - High Efficiency : Up to 88~92%
 - High PF (90% ↑), Low THD (20% ↓)
 - Wide Vin : 108~305VAC
 - Wide Vout : $\pm 30\%$ LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 80°C
- **High Surge Immunity**
 - L-L 4KV ↑, L-FG 8KV ↑
- **Classification : Class II**
 - No Leakage Current : Line – FG



Type	Input	Output	Output
PSD* □□□□□□K/N PSD* □□□□□□U/X	Wire 18AWG	Wire 18AWG	SMW200A–07
Opposite	Wire 18AWG	Wire 18AWG	ILUUM 7Pin_SN170582



Size M1

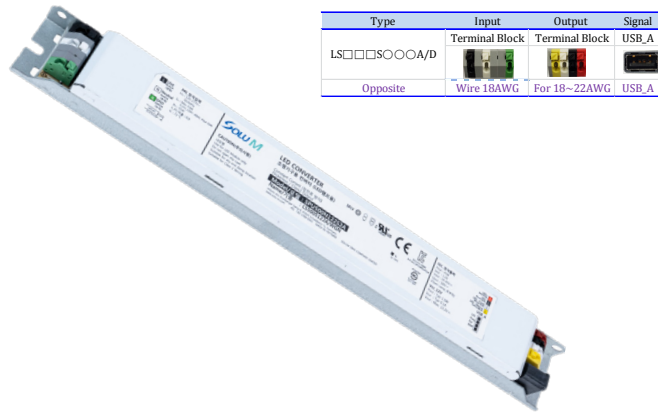


Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
ILU400M701U1K	PSDV400701K/N																			CB,CE,KC,KS	M1
ILU400M701U1U	PSDV400701U/X		500	700	25	50	99	305	47	12	39	87	●	5%		●	●	●		CB,CE, UL Class2	
ILU600M102U1K	PSDV600102K/N																			CB,CE,KC,KS	M1
ILU600M102U1U	PSDV600102U/X		700	1050	25	46	108	305	62	17	53	88	●	5%		●	●	●		CB,CE, UL Class2	
ILU700M142U1K	PSDV700142K/N																			CB,CE,KC,KS	M1
ILU700M142U1U	PSDV700142U/X		1050	1400	25	43	108	305	75	25	66	89	●	5%		●	●	●		CB,CE, UL Class2	

SPUS_NA Series_Platform II –Smart Gen2 / Tunnable

Linear, GUI Programmable, C–Unified Dim for SMART Control, STBY& Fault Det, Flickerfree(No AC ripple current)

- **CCCV** (Constant Current & Constant Voltage)
- **Flickerless** : FI <0.01 ,%F < 5% (@<800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- **High Density Power (Slim_Narrow Size)**
 - M2_Dimension : 280(L) * 29.4(W) * 22.9(H)
- **Low Stand by Power Dissipation** : 0.5W ↓
 - Applied Eco Design & Energy star : 0.5W ↓
- **C–Unified Dim for SMART Control_Gen2**
 - Uart_On/Off , Dim, Tunnable
 - Status Monitoring, Power Metering
- **Programmable UI**
 - AOC : Control Output Current
 - Dim to off : Dim off or Min Dim, Set Min current
 - OPP : Overpower limit, Selestable Dim type
- **Aux Power** : 12Vdc 150mA PK
- **High Performance**
 - High Efficiency : Up to 86~88%
 - High PF (90% ↑), Low THD (20% ↓)
 - Wide Vin : 108~305VAC
 - Wide Vout : ± 30% LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 73°C
- **High Surge Immunity**
 - L–L 4KV ↑ , L–FG 6KV ↑
- **Classification : Class II**
 - No Leakage Current : Line – FG



Type	Input	Output	Signal
LS□□□□□□□□/D	Terminal Block	Terminal Block	USB_A
Opposite	Wire 18AWG	For 18~22AWG	USB_A

Size M2

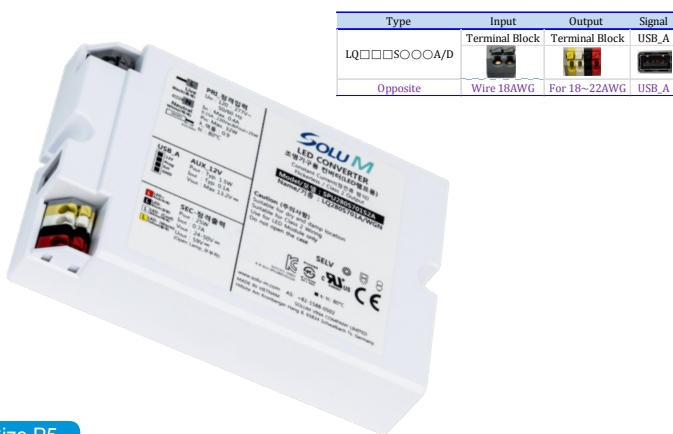


Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po	CH	Eff [%]	Dimming			Function				Certificate	Case	
		Max			Min	Max	Min	Max	Max	Max			Non	Dim Type	Dim off	Aux [V]	STBY [W]	Monit	AOC			
		Min	Rset	Default																		
SPU280N701S2A	LS280S701A/WGN	350	700	500	24	50	108	300	32	25	2	87	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,UL Class 2	M2	
	LS280S701D/WGN																					
SPU500N122S2A	LS500S122A/WGN	700	1200	1000	24	45	108	300	55	45	2	88	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,UL Class 2	M2	
	LS500S122D/WGN																					

SPUS_SQ Series_Platform II –Smart Gen2 / Tunable

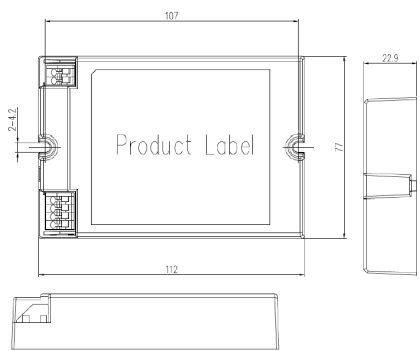
Square, GUI Programmable, C–Unified Dim for SMART Control, STBY& Fault Det, Flickerfree(No AC ripple current)

- **CCCV** (Constant Current & Constant Voltage)
- **Flickerless** : FI <0.01 ,%F < 5% (@<800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- **High Density Power (Slim_Square Size)**
 - P5_Dimension : 112(L) * 77.0(W) * 22.9(H)
- **Low Stand by Power Dissipation** : 0.5W ↓
 - Applied Eco Design & Energy star : 0.5W ↓
- **C–Unified Dim for SMART Control_Gen2**
 - Uart_On/Off , Dim, Tunnable
 - Status Monitoring, Power Metering
- **Programmable UI**
 - AOC : Control Output Current
 - Dim to off : Dim off or Min Dim, Set Min current
 - OPP : Overpower limit, Selestable Dim type
- **Aux Power** : 12Vdc 150mA PK
- **High Performance**
 - High Efficiency : Up to 86~88%
 - High PF (90% ↑), Low THD (20% ↓)
 - Wide Vin : 108~305VAC
 - Wide Vout : ± 30% LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 75°C
- **High Surge Immunity**
 - L–L 4KV ↑ , L–FG 6KV ↑
- **Classification : Class II**
 - No Leakage Current : Line – FG



Type	Input	Output	Signal
LQ□□□□□□□□/D	Terminal Block	Terminal Block	USB_A
Opposite	Wire 18AWG	For 18~22AWG	USB_A

Size P5



Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po	CH	Eff [%]	Dimming			Function				Certificate	Case	
		Max			Min	Max	Min	Max	Max	Max			Non	Dim Type	Dim off	Aux [V]	STBY [W]	Monit	AOC			
		Min	Rset	Default																		
SPU280S701S2A	LQ280S701A/WGN	350	700	500	24	50	108	300	32	25	2	87	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS, UL Class 2	P5	
	LQ280S701D/WGN																					
SPU500S122S2A	LQ500S122A/WGN	700	1200	1000	24	45	108	300	55	45	2	88	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS, UL Class 2	P5	
	LQ500S122D/WGN																					

OLWN Series_Platform I

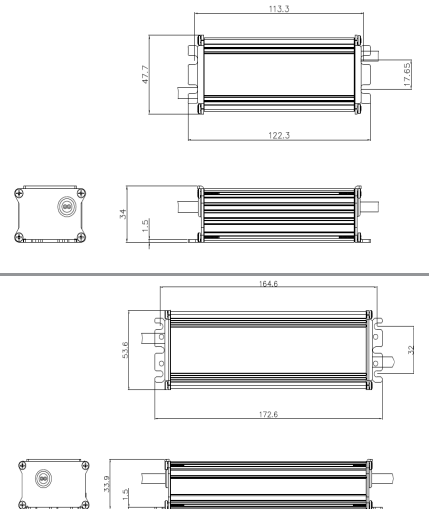
IP67, Independent, Fixed/Non-Dim, Flickerfree(No AC ripple current)

- CCCV (Constant Current & Constant Voltage)
- Flickerless : FI < 0.01 , %F < 5% (@800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- High Density Power (Compact Size)
 - A1_Dimension : 122.3(L) * 47.7(W) * 34.0(H)
 - B1_Dimension : 172.6(L) * 53.6(W) * 34.0(H)
- Low Power Dissipation @ No Load : 0.7W ↓
 - Applied EU No 1194_2014.09 : 1.0W ↓
- High Performance
 - High Efficiency : Up to 85~93%
 - High PF (90% ↑), Low THD (10% ↓)
 - Wide Vout : ± 30% LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 85°C
- High Surge Immunity
 - L-L 4KV ↑, L-FG 8KV ↑
- Classification : Class II
- IP67, Independant type



Size A1

Type	Input	Output
PSO*□□□□□□A/D	Wire 18AWG	Wire 18AWG
Opposite	Wire 18AWG	Wire 18AWG
PSO*□□□□□□B/E	Wire 18AWG	MG610320
Opposite	Wire 18AWG	MG640322



Size B1

Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
OLW160P351N1A	PSOV160351A/D																			CB,CE,KC,KS	A1
	PSOV160351B/E			350	23	41	99	264	18	8	15	86	●								
OLW250P701N1A	PSOV250701A/D																			CB,CE,KC,KS	A1
	PSOV250701B/E			700	18	33	99	264	28	12	24	86	●								
OLB400P701N1A	PSOH400701A/D																			CB,CE,KC,KS	A1
	PSOH400701B/E			700	27	50	198	264	42	18	37	88	●								
OLB500P701N1A	PSOH500701A/D																			CB,CE,KC,KS	A1
	PSOH500701B/E			700	36	65	198	264	53	24	48	90	●								
OLB131P701N1A	PSOH131701A/D																			CB,CE,KC,KS,BIS	B1
	PSOH131701B/E			700	65	160	198	264	128	43	118	92	●								
OLB420P901N1A	PSOH420901A/D																			CB,CE,KC,KS	A1
	PSOH420901B/E			900	23	43	198	264	46	20	41	89	●								
OLB470P102N1A	PSOH470102A/D																			CB,CE,KC,KS	A1
	PSOH470102B/E			1050	23	43	198	264	53	23	47	89	●								

OLUU [OLUU(D)] Series_Platform II –Smart Gen1

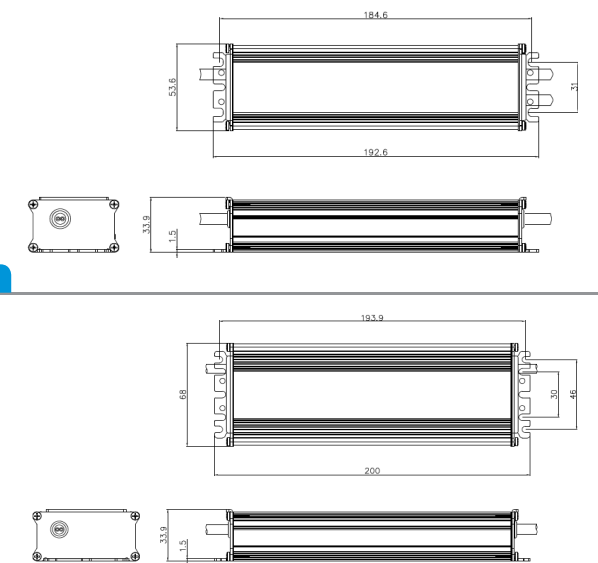
IP67, Independent, Rset, Unified Dim for SMART Control, STBY, Flickerfree(No AC ripple current)

- CCCV (Constant Current & Constant Voltage)
- Flickerless : FI < 0.01 , %F < 5% (@800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- High Density Power (Small Size)
 - B2_Dimension : 192.6(L) * 53.6(W) * 34.0(H)
 - C1_Dimension : 125.0(L) * 68.0(W) * 34.0(H)
 - C3_Dimension : 200.0(L) * 68.0(W) * 34.0(H)
 - C4_Dimension : 211.0(L) * 68.0(W) * 34.0(H)
- Low Stand by Power Dissipation : 0.25W ↓
 - Applied Eco Design & Energy star : 0.5W ↓
- Unified Dim for SMART Control
 - Dim(0~10V), Remote, Vcc, Status Monitoring
 - Deep Dimming ~5%
 - AOC_Adjustable Output Current
 - Selectable Dim to off : Dim off , Min Dim
- High Performance
 - High Efficiency : Up to 88~94%
 - High PF (90% ↑), Low THD (20% ↓)
 - Wide Vin : 108~305VAC
 - Wide Vout : ± 30% LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 80°C
- High Surge Immunity
 - L-L 4KV ↑, L-FG 8KV ↑
- Classification : Class II
- IP67, Independant type



Size B2

Type	Input	Output
PSO*□□□□□□A/D(N)	Wire 18AWG	Wire 18AWG
Opposite	Wire 18AWG	Wire 18AWG
PSO*□□□□□□B/E(N)	Wire 18AWG	MG610320
Opposite	Wire 18AWG	MG640322
PSO*□□□□□□C/V	Wire 18AWG	JWPF
Opposite	Wire 18AWG	JWPT



Size C4

Basic

■ Region

1) OLU□□□□□□□□□□U1A :
KC,KS,CE_Wire(IEC,Rubber)

- Products Type
- PSOV□□□□□□□□A/B/C

2) OLU□□□□□□□□□□U1U :
CE, UL_Wire (UL,PVC)

- Products Type
- PSOV□□□□□□□□□□U/V/W

Derived Products 1

■ Type 1. Waterproof CNT

- 1) PSOV□□□□□□□□ A / U : Wire_General
- 2) PSOV□□□□□□□□ B / W : KET_MG610320
- 3) PSOV□□□□□□□□ C / V : JST_02R-JWPF

■ Type 2. Dim to Off

- : Dimming 1.0V ↓ LED OFF
- STBY Mode PSOV□□□□□□□□ * (D)

Type	Output CNT	
PSOV□□□□□□□□A PSOV□□□□□□□□U	Wire	
PSOV□□□□□□□□B PSOV□□□□□□□□W	MG610320(KET)	
PSOV□□□□□□□□C PSOV□□□□□□□□V	02R-JWPF-*(JST) / 02R-JWPKF-*(JST)	

Derived Products 2

■ Non Dim

→ Removed only Dim-Cable

Model: OLU□□□□□□□□□□N1A

Type: PSOV□□□□□□□□ * (N)

Basic			Dim off	Non dim	
Applied	Model	Type	Type	Model _ Non Dim	Type
KC,KS,CE (Independent)	OLU□□□P□□□U1A	PS0V□□□□□□□□ A	PS0V□□□□□□□□ A(D)	OLU□□□P□□□N1A	PS0V□□□□□□□□ A(N)
		PS0V□□□□□□□□ B	PS0V□□□□□□□□ B(D)		PS0V□□□□□□□□ B(N)
		PS0V□□□□□□□□ C			
UL,CE (Built in)	OLU□□□P□□□U1U	PS0V□□□□□□□□ U	PS0V□□□□□□□□ U(D)	OLU□□□P□□□N1U	PS0V□□□□□□□□ U(N)
		PS0V□□□□□□□□ V	PS0V□□□□□□□□ V(D)		PS0V□□□□□□□□ V(N)
		PS0V□□□□□□□□ W			

OLUU Series_Platform II-Smart Gen1<100W

IP67, Independent, Rset, Unified Dim for SMART Control, STBY, Flickerfree(No AC ripple current)

Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
OLU250P351U1A	PSOV250351A/D	250	350	27	54	108	305	26	6	22	85	●	5%	●	●	●	●	●	CB,CE,KC,KS	C1	
	PSOV250351B/E																				
OLU250P351U1U	PSOV250351U/X																				
	PSOV250351W/Z																		UL Class2,CE		
OLU300P601U1A	PSOV300601A/D	350	600	20	38	108	305	30	7	26	87	●	5%		●	●	●	●	CB,CE,KC,KS	B2	
	PSOV300601B/E																				
OLU300P601U1U	PSOV300601U/X																				
	PSOV300601W/Z																		UL Class2, CE		
OLU400P701U1A	PSOV400701A/D	500	700	25	50	108	305	45	12	39	87	●	5%		●	●	●	●	CB,CE,KC,KS	B2	
	PSOV400701B/E																				
OLU400P701U1U	PSOV400701U/X																				
	PSOV400701W/Z																		UL Class2, CE		
OLU550P102U1A	PSOV550102A/D	700	1050	25	46	99	305	60	17	53	88	●	5%		●	●	●	●	CB,CE,KC,KS	B2	
	PSOV550102B/E																				
OLU550P102U1U	PSOV550102U/X																				
	PSOV550102W/Z																		UL Class2, CE		
OLU530P122U1A	PSOV530122A/D	800	1200	20	38	108	305	57	15	50	89	●	5%		●	●	●	●	CB,CE,KC,KS	B2	
	PSOV530122B/E																				
OLU530P122U1U	PSOV530122U/X																				
	PSOV530122W/Z																		UL Class2, CE		
OLU750P701U1A	PSOV750701A/D	500	700	55	94	108	305	79	26	72	91	●	5%		●	●	●	●	CB,CE,KC,KS	B2	
	PSOV750701B/E																				
OLU750P701U1U	PSOV750701U/X																				
	PSOV750701W/Z																		UL Non-Class2,CE		
OLU700P142U1A	PSOV700142A/D	1050	1400	25	43	108	305	75	25	66	88	●	5%		●	●	●	●	CB,CE,KC,KS	B2	
	PSOV700142B/E																				
OLU700P142U1U	PSOV700142U/X																				
	PSOV700142W/Z																		UL Class2, CE		
OLU850P182U1A	PSOV850182A/D	1200	1800	20	38	108	305	84	23	74	89	●	5%		●	●	●	●	CB,CE,KC,KS	B2	
	PSOV850182B/E																				
OLU850P182U1U	PSOV850182U/X																				
	PSOV850182W/Z																		UL Class2, CE		
OLU900P212U1A	PSOV900212A/D	1400	2100	20	38	108	305	95	27	86	91	●	5%		●	●	●	●	CB,CE,KC,KS	B2	
	PSOV900212B/E																				
OLU900P212U1U	PSOV900212U/X																				
	PSOV900212W/Z																		UL Class2, CE		

OLUU Series_Platform II –Smart Gen1 <200W

IP67, Independent, Rset, Unified Dim for SMART Control, STBY, Flickerfree(No AC ripple current)

Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
OLU131P701U1A	PSOV131701A/D	500	700	90	160	108	305	128	43	120	94	●	5%		●	●	●		CB,CE,KC,KS	C3	
	PSOV131701B/E																				
	PSOV131701U/X																				
	PSOV131701W/Z																				
OLU121P701U1A	PSOV121701A/D	500	700	90	160	108	305	129	43	120	93	●	5%	●	●	●	●		CB,CE,KC,KS	C3	
	PSOV121701B/E																				
	PSOV121701U/X																				
	PSOV121701W/Z																				
OLU121P142U1A	PSOV121142A/D	700	1400	50	80	108	305	132	33	120	91	●	5%	●	●	●	●		CB,CE,KC,KS	C3	
	PSOV121142B/E																				
	PSOV121142U/X																				
	PSOV121142W/Z																				
OLU121P212U1A	PSOV121212A/D	1400	2100	34	52	108	305	129	45	117	91	●	5%	●	●	●	●		CB,CE,KC,KS	C3	
	PSOV121212B/E																				
	PSOV121212U/X																				
	PSOV121212W/Z																				
OLU201P701U1A	PSOV201701A/D	500	700	160	250	108	305	196	76	186	95	●	5%		●	●	●		CB,CE,KC,KS PSE (Vout 160-220)	C4	
	PSOV201701B/E																				
	PSOV201701U/X																				
	PSOV201701W/Z																				

OLUU(D) Series_Platform II –Smart Gen1 [Dim_off]

IP67, Independent, Rset, Unified Dim for SMART Control, STBY, Flickerfree(No AC ripple current)

Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
OLU250P351U1A	PSOV250351A/D												●	5%	●	●	●	●		CB,CE,KC,KS	C1
	PSOV250351B/E																				
	PSOV250351U/X																				
	PSOV250351W/Z																				
OLU250P351U1U																			UL Class2,CE		
OLU300P601U1A	PSOV300601A/D(D)												●	5%	Off	●	●	●		CB,CE,KC,KS	B2
	PSOV300601B/E(D)																				
	PSOV300601U/X(D)																				
	PSOV300601W/Z(D)																				
OLU300P601U1U																			UL Class2, CE		
OLU530P122U1A	PSOV530122A/D(D)												●	5%	Off	●	●	●		CB,CE,KC,KS	B2
	PSOV530122B/E(D)																				
	PSOV530122U/X(D)																				
	PSOV530122W/Z(D)																				
OLU530P122U1U																			UL Class2, CE		
OLU850P182U1A	PSOV850182A/D(D)												●	5%	Off	●	●	●		CB,CE,KC,KS	B2
	PSOV850182B/E(D)																				
	PSOV850182U/X(D)																				
	PSOV850182W/Z(D)																				
OLU850P182U1U																			UL Class2, CE		
OLU131P701U1A	PSOV131701A/D(D)												●	5%	Off	●	●	●		CB,CE,KC,KS	C3
	PSOV131701B/E(D)																				
	PSOV131701U/X(D)																				
	PSOV131701W/Z(D)																				
OLU131P701U1U																			UL Non-Class2,CE		
OLU201P701U1A	PSOV201701A/D(D)												●	5%	Off	●	●	●		CB,CE,KC,KS	C4
	PSOV201701B/E(D)																				
	PSOV201701U/X(D)																				
	PSOV201701W/Z(D)																				
OLU201P701U1U																			UL Non-Class2,CE		

OLUN Series_Platform II –Fixed <100W

IP67, Independent, Fixed / Non–Dim, Flickerfree(No AC ripple current)

Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
OLU250P351N1A	PSOV250351A/D(N)																		CB,CE,KC,KS	C1	
	PSOV250351B/E(N)			350	27	54	108	305	26	9	22	85	●								
OLU250P351N1U	PSOV250351U/X(N)																		UL Class2,CE		
	PSOV250351W/Z(N)																				
OLU300P601N1A	PSOV300601A/D(N)																		CB,CE,KC,KS	B2	
	PSOV300601B/E(N)			600	20	38	108	305	30	11	26	87	●								
OLU300P601N1U	PSOV300601U/X(N)																		UL Class2, CE		
	PSOV300601W/Z(N)																				
OLU400P701N1A	PSOV400701A/D(N)																		CB,CE,KC,KS	B2	
	PSOV400701B/E(N)			700	25	50	108	305	45	17	39	87	●								
OLU400P701N1U	PSOV400701U/X(N)																		UL Class2, CE		
	PSOV400701W/Z(N)																				
OLU550P102N1A	PSOV550102A/D(N)																		CB,CE,KC,KS	B2	
	PSOV550102B/E(N)			1050	25	46	99	305	60	25	53	88	●								
OLU550P102N1U	PSOV550102U/X(N)																		UL Class2, CE		
	PSOV550102W/Z(N)																				
OLU530P122N1A	PSOV530122A/D(N)																		CB,CE,KC,KS	B2	
	PSOV530122B/E(N)			1200	20	38	108	305	58	23	50	89	●								
OLU530P122N1U	PSOV530122U/X(N)																		UL Class2, CE		
	PSOV530122W/Z(N)																				
OLU750P701N1A	PSOV750701A/D(N)																		CB,CE,KC,KS	B2	
	PSOV750701B/E(N)			700	55	94	108	305	79	37	72	91	●								
OLU750P701N1U	PSOV750701U/X(N)																		UL Non-Class2,CE		
	PSOV750701W/Z(N)																				
OLU700P142N1A	PSOV700142A/D(N)																		CB,CE,KC,KS	B2	
	PSOV700142B/E(N)			1400	25	43	108	305	75	33	66	88	●								
OLU700P142N1U	PSOV700142U/X(N)																		UL Class2, CE		
	PSOV700142W/Z(N)																				
OLU850P182N1A	PSOV850182A/D(N)																		CB,CE,KC,KS	B2	
	PSOV850182B/E(N)			1800	20	38	108	305	85	34	74	89	●								
OLU850P182N1U	PSOV850182U/X(N)																		UL Class2, CE		
	PSOV850182W/Z(N)																				
OLU900P212N1A	PSOV900212A/D(N)																		CB,CE,KC,KS	B2	
	PSOV900212B/E(N)			2100	20	38	108	305	95	40	86	91	●								
OLU900P212N1U	PSOV900212U/X(N)																		UL Class2, CE		
	PSOV900212W/Z(N)																				

OLUN Series_Platform II –Fixed <200W

IP67, Independent, Fixed / Non–Dim, Flickerfree(No AC ripple current)

Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
OLU131P701N1A	PSOV131701A/D(N)			700	90	160	108	305	129	60	120	94	●							CB,CE,KC,KS	C3
	PSOV131701B/E(N)																				
OLU131P701N1U	PSOV131701U/X(N)																		UL Non-Class2,CE		
	PSOV131701W/Z(N)																				
OLU121P142N1A	PSOV121142A/D(N)			1400	50	80	99	305	132	67	120	91	●							CB,CE,KC,KS	C3
	PSOV121142B/E(N)																				
OLU121P142N1U	PSOV121142U/X(N)																		UL Non-Class2,CE		
	PSOV121142W/Z(N)																				
OLU121P212N1A	PSOV121212A/D(N)			2100	34	52	99	305	129	68	117	91	●							CB,CE,KC,KS	C3
	PSOV121212B/E(N)																				
OLU121P212N1U	PSOV121212U/X(N)																		UL Non-Class2,CE		
	PSOV121212W/Z(N)																				
OLU121P701N1A	PSOV121701A/D(N)			700	90	160	108	305	129	60	120	93	●							CB,CE,KC,KS	C3
	PSOV121701B/E(N)																				
OLU121P701N1U	PSOV121701U/X(N)																		UL Non-Class2,CE		
	PSOV121701W/Z(N)																				
OLU201P701N1A	PSOV201701A/D(N)			700	160	250	108	305	198	106	186	95	●							CB,CE,KC,KS PSE (Vout 160-220V)	C4
	PSOV201701B/E(N)																				
OLU201P701N1U	PSOV201701U/X(N)																		UL Non-Class2,CE		
	PSOV201701W/Z(N)																				

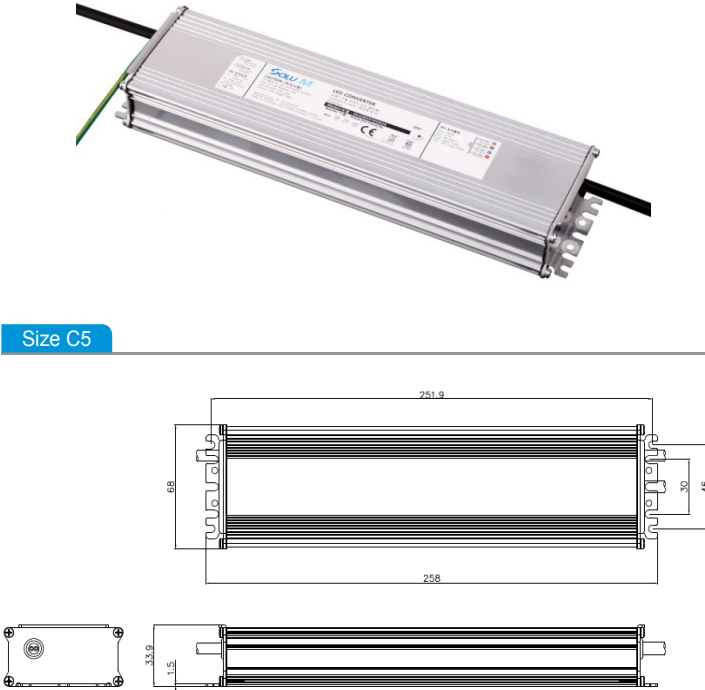
OLUN2 Series_Platform II –Fixed

IP67, Independent, 2Ch Output, Fixed / Non–Dim, Flickerfree(No AC ripple Current)

- CCCV (Constant Current & Constant Voltage)
- Flickerless : FI <0.01 ,%F < 5% (@<800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- High Density Power
 - C5_Dimension : 258.0(L) * 68.0(W) * 34.0(H)
- Multii Output CH_2ch
 - Seperated Output Control Per Ch
- High Performance
 - High Efficiency : Up to 88~94%
 - High PF (90% ↑), Low THD (20% ↓)
 - Wide Vin : 108 ~ 305VAC
 - Wide Vout : ± 30% LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 85℃
- High Surge Immunity
 - L-L 6KV ↑ , L-FG 8KV ↑
- Classification : Class II
- IP67, Independant type 



Type	Input	Output
PSO*□□□□□□A/D	Wire 18AWG	Wire 18AWG
Opposite	Wire 18AWG	Wire 18AWG
PSO*□□□□□□B/E	Wire 18AWG	MG610320
Opposite	Wire 18AWG	MG640322



Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
OLU201P701N2A	PSZ201701A/D(N)			700	80	130	108	305	208	106	194	93	●							CB,CE,KC,KS	C5

OLUA Series_Platform II (한국도로공사 표준)

IP67, Independent, Fixed / Dim, Flickerfree(No AC ripple Current)

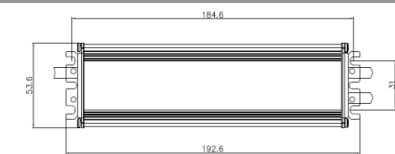
- CCCV (Constant Current & Constant Voltage)
- Flickerless : FI <0.01 ,%F < 5% (@<800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- High Density Power
 - B2_Dimension : 192.6(L) * 54.0(W) * 34.0(H)
 - C4_Dimension : 211.0(L) * 68.0(W) * 34.0(H)
 - C5_Dimension : 258.0(L) * 68.0(W) * 34.0(H)
- Analog Dim
 - Dim(0~10V)_Dimming ~10%
- High Performance
 - High Efficiency : Up to 88~94%
 - High PF (90% ↑), Low THD (20% ↓)
 - Wide Vin : 180 ~ 300VAC
 - Wide Vout : ± 30% LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 85℃
- High Surge Immunity
 - L-L 6KV ↑ , L-FG 8KV ↑
- Classification : Class II
- IP67, Independant type



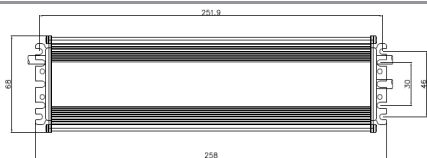
Type	Input	Output	Input
PSO*□□□□□□R/P	Wire 18AWG	Wire 18AWG	Wire 22AWG
Opposite	Wire 18AWG	Wire 18AWG	Wire 22AWG
PSO*□□□□□□T/Q	02T-WPUN-2-RM(RD)	02T-WPUN-3-EM(BLU)	02T-JWPF-VSLE
Opposite	02T-WPUN-2-RM(RD)	02T-WPUN-3-EM(BLU)	02R-JWPF-VSLE-S
PSO*□□□□□□M/N	Wire 18AWG	5557-02R	2504HS-02P
Opposite	Wire 18AWG	5559-02P	25045HP-02



Size B2



Size C5



Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	0-10	Dim off	12V	AOC	Uni Dim	Prog DALI		
		S-Ret	Rset	Default																	
OLU250P701U1A	PSOV250701R/P PSOV250701M/N			700	22	33	198	264	30	15	27	88	●	10%					CB,CE,KC,KS (도로공사向 25W)	B2	
OLU750P212U1A	PSOV750212R/P PSOV750212M/N			2100	22	33	198	264	86	44	75	88	●	10%					CB,CE,KC,KS (도로공사向 75W)	B2	
OLU121P282U1A	PSOV121282R/P PSOV121282T/Q			2800	25	38	180	300	127	67	114	90	●	10%					CB,CE,KC,KS (도로공사向 100W)	C4	
OLU151P422U1A	PSOV151422R/P PSOV151422T/Q			4200	25	38	180	300	185	100	170	92	●	10%					CB,CE,KC,KS (도로공사向 150W)	C4	
OLU201P562U1A	PSOV201562R/P PSOV201562T/Q PSOV201562M/N			5600	27	33	180	300	214	144	197	92	●	10%					CB,CE,KC,KS (도로공사向 200W)	C5	

OPUD Series_Platform II –Smart Gen2 – DALI 2.0/D4i

IP67, Independent, GUI Programmable / DALI2.0, Flickerfree(No AC ripple current)

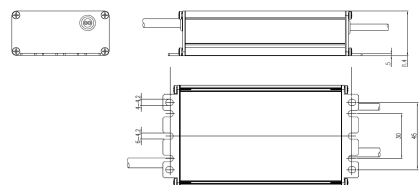
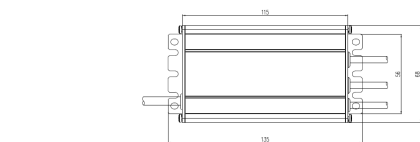
- CCCV (Constant Current & Constant Voltage)
- Flickerless : FI <0.01 ,%F < 5% (@<800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- High Density Power
 - D1_Dimension : 115(L) * 68.0(W) * 31.4(H)
 - D1-1_Dimension : 137(L) * 68.0(W) * 31.4(H)
- Programmable UI
 - AOC_Adjustable Of Current
- Dimming
 - Certified DALI 2.0
 - Deep Dimming ~5%
- Low Stand by Power Dissipation : 0.25W ↓
 - Applied Eco Design & Energy star : 0.5W ↓
- High Performance
 - High Efficiency : Up to 88~94%
 - High PF (90% ↑), Low THD (20% ↓)
 - Wide Vin : 108 ~ 305VAC
 - Wide Vout : ± 30% LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 85℃
- High Surge Immunity
 - L-L 6KV ↑ , L-FG 8KV ↑
- Classification : Class II
- IP67, Independant type



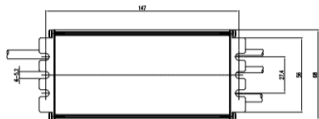
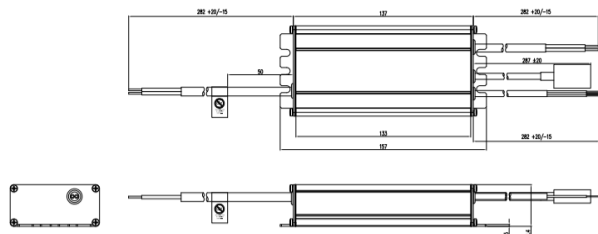
Type	Input	Output	Signal	DALI
LP□□□□□□A	Wire 18AWG	Wire 18AWG	USB "A"	Wire
LP□□□□□□U	Opposite	Wire 18AWG	Wire 18AWG	USB "A"



Size D1



Size D1-1



Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	Dim Type	Dim off	Aux [V]	STBY [W]	Monit	AOC		
		S-Ret	Rset	Default																	
OPU350P701D1U	LP350U701A/WSL		350	700	30	56	108	305	46	20	35	88	●	DALI 2.0	●	24V	0.5	●	Prog_GUI	CB, CE, RCM, IP67 DALI 2.0	D1
OPU350P701D1D	LP350U701A/WGN																			CB, CE, RCM, IP67 DALI 2.0 & D4i	D1-1
OPU350P701D1U	LP350U701U/WGN		350	700	30	56	108	305	46	20	35	88	●	DALI 2.0 D4i	●	24V	0.5	●	Prog_GUI	CB, CE, UL, IP67 DALI 2.0 & D4i	

OPUS Series_Platform II – Smart Gen2

IP67, GUI Programmable, C–Unified Dim for SMART Control, STBY, Fault Det, Flickerfree(No AC ripple current)

- **CCCV (Constant Current & Constant Voltage)**
- **Flickerless** : FI $\ll 0.01$,%F $\ll 5\%$ (@<800Hz)
 - Built-in active PFC
 - Low Output Current Ripple : 5% ↓
- **High Density Power**
 - D2_Dimension : 180(L) * 68.0(W) * 31.4(H)
 - D3_Dimension : 200(L) * 68.0(W) * 31.4(H)
 - D4_Dimension : 211(L) * 68.0(W) * 31.4(H)
- **C–Unified Dim for SMART Control**
 - Uart_On/Off, Dim
 - Status Monitoring, Power Metering
- **Programmable UI**
 - AOC_Adjustable Of Current
 - Dim to off : Dim off or Min Dim, Set Min current
 - OPP : Overpower limit, Selestable Dim type
- **Low Stand by Power Dissipation : 0.5W ↓**
 - Applied Eco Design & Energy star : 0.5W ↓
- **Aux Power : 12Vdc 250mA PK**
- **High Performance**
 - High Efficiency : Up to 88~94%
 - High PF (90% ↑), Low THD (20% ↓)
 - Wide Vin : 108 ~ 305VAC
 - Wide Vout : $\pm 30\%$ LED Load
 - Protection : OLP, SCP, OVP, OCP, OTP_Autorecovery
 - Temperature t_c : 85°C
- **High Surge Immunity**
 - L–L 6KV ↑, L–FG 8KV ↑
- **Classification : Class II**
- **IP67, Independant type** 

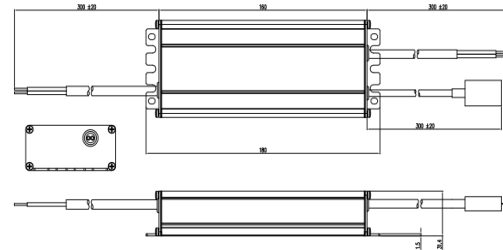


한국표준협회
제 16-0428호
(KS C 7655)

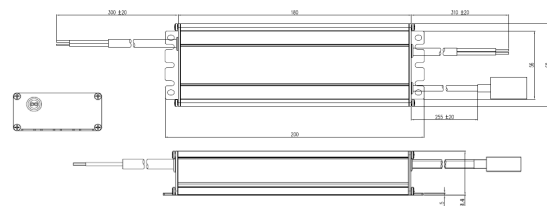
Type	Input	Output	Signal
LP□□□*○○○A	Wire 18AWG	Wire 18AWG	USB "A"
LP□□□*○○○U	Wire 18AWG	Wire 18AWG	USB "A"
Opposite	Wire 18AWG	Wire 18AWG	USB "A"



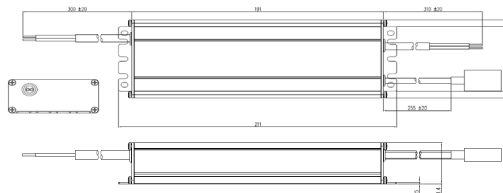
Size D2



Size D3



Size D4



OPUS Series_Platform II – Smart Gen2

IP67, GUI Programmable, C–Unified Dim for SMART Control, STBY, Fault Det, Flickerfree(No AC ripple current)

Model	Code	Io [mA]			Vo [V]		Uin [V]		Pin	Po [W]		Eff [%]	Dimming			Function				Certificate	Case
		Max			Min	Max	Min	Max	Max	Min	Max		Non	Dim Type	Dim off	Aux [V]	STBY [W]	Monit	AOC		
		S-Ret	Rset	Default																	
OPU400P901S1A	LP400S901AWGN	45	900	700	30	56	108	300	44	2	35	89	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,IP67	D1
	LP400S901DWGN																				
OPU400P901S1U	LP400S901UWGN	45	900	700	30	56	108	300	44	2	35	89	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,UL,IP67	D1
	LP400S901XWGN																				
OPU900P901S1A	LP900S901AWGN	45	900	700	60	110	108	300	98	5	90	92	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,IP67	D2
	LP900S901DWGN																				
OPU900P901S1U	LP900S901UWGN	45	900	700	60	110	108	300	98	5	90	92	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,UL,IP67	D2
	LP900S901XWGN																				
OPU900P162S1A	LP900S162AWGN	80	1600	1400	45	75	108	300	98	5	90	91	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,IP67	D2
	LP900S162DWGN																				
OPU900P162S1U	LP900S162UWGN	80	1600	1400	45	75	108	300	98	5	90	91	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,UL,IP67	D2
	LP900S162XWGN																				
OPU900P212S1A	LP900S212AWGN	100	2100	2100	25	50	108	300	98	5	90	91	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,IP67	D2
	LP900S212DWGN																				
OPU900P212S1U	LP900S212UWGN	100	2100	2100	25	50	108	300	98	5	90	91	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,UL,IP67	D2
	LP900S212XWGN																				
OPU141P901S1A	LP141S901AWGN	45	900	700	90	170	108	300	140	4	125	94	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,IP67	D3
	LP141S901DWGN																				
OPU141P901S1U	LP141S901UWGN	45	900	700	90	170	108	300	140	4	125	94	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,UL,IP67	D3
	LP141S901XWGN																				
OPU141P162S1A	LP141S162AWGN	80	1600	1400	50	100	108	300	140	4	125	94	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,IP67	D3
	LP141S162DWGN																				
OPU141P162S1U	LP141S162UWGN	80	1600	1400	50	100	108	300	140	4	125	94	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,UL,IP67	D3
	LP141S162XWGN																				
OPU201P801S1A	LP201S801AWGN	40	800	700	150	270	108	300	200	6	190	94	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,IP67	D4
	LP201S801DWGN																				
OPU201P801S1U	LP201S801UWGN	40	800	700	150	270	108	300	200	6	190	94	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,UL,IP67	D4
	LP201S801XWGN																				
OPU201P162S1A	LP201S162AWGN	80	1600	1400	100	150	108	300	200	8	190	94	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,KC,KS,IP67	D4
	LP201S162DWGN																				
OPU201P162S1U	LP201S162UWGN	80	1600	1400	100	150	108	300	200	8	190	94	●	Smart_Uart	●	12	0.5	●	Prog_GUI	CB,CE,UL,IP67	D4
	LP201S162XWGN																				

SMART Module_LCM-DALI/DMX-Smart Gen1

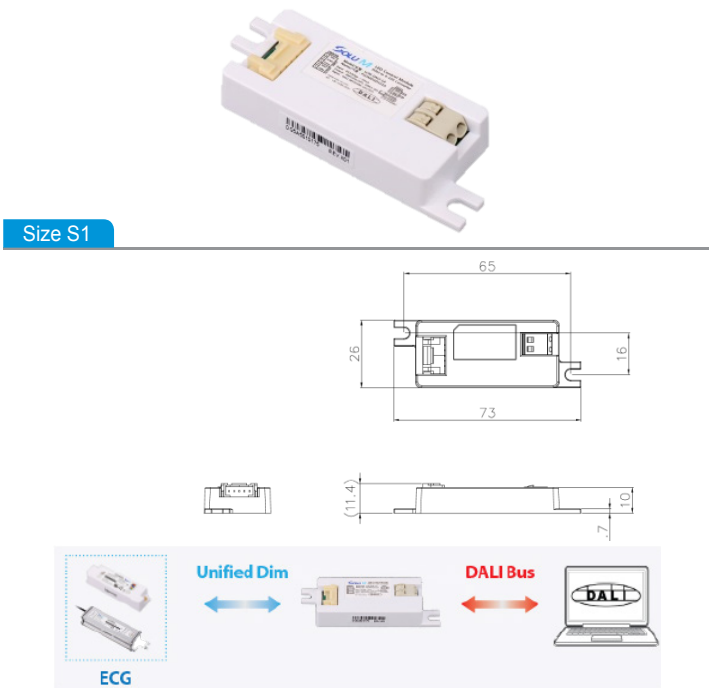
Lighting Connectivity Module. Wired Control, DALI/DMX

DALI

- Features**
 - ① Accordance With the DALI standards
 - IEC62386-102, 207
 - ② Basic Insulation _DALI Line
 - Polarity Free & Overvoltage protect
 - ③ Dimming : 10~100%
 - Logarithmic Curve : Default setting
 - Linear Curve : DALI Command 227(207part)
 - ④ LED Off
 - Low Power Consumption(STBY Mode)

- Small Size**
 - S1_Dimension : 73(L) * 26(W) * 10(H)

- Basic Function & ECG Interface**
 - Based on Uni-Dim Control ECG
 - ① Vcc : 12Vdc input
 - ② GND
 - ③ Vsen : Status Monitoring_Fault Detection
 - ④ RMT : LED OFF (STBY mode_ < 0.25W)
 - ⑤ Dim : 10~100% (Analog)

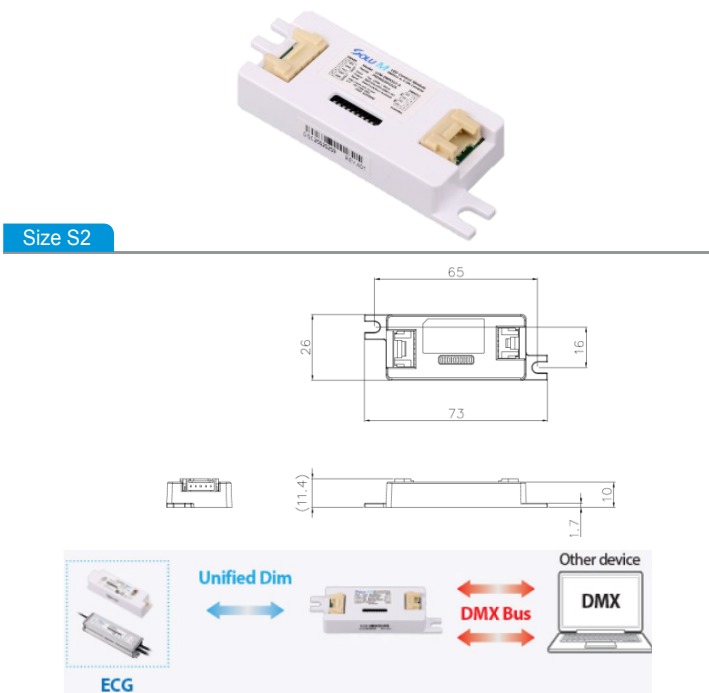


DMX

- Features**
 - ① Accordance With the DMX standards
 - DMX512 Standards (DMX512A)
 - ② Set DMX address with Dip Switch
 - Channel : 1 ~ 512
 - ③ Dimming : 10~100%
 - ④ LED Off
 - Low Power Consumption(STBY Mode)

- Small Size**
 - S2_Dimension : 73(L) * 26(W) * 10(H)

- Basic Function & ECG Interface**
 - Based on Unified Dim Control ECG
 - ① Vcc : 12Vdc input
 - ② GND
 - ③ Vsen : Status Monitoring_Fault Detection
 - ④ RMT : LED OFF (STBY mode_ < 0.25W)
 - ⑤ Dim : 10~100% (Analog)



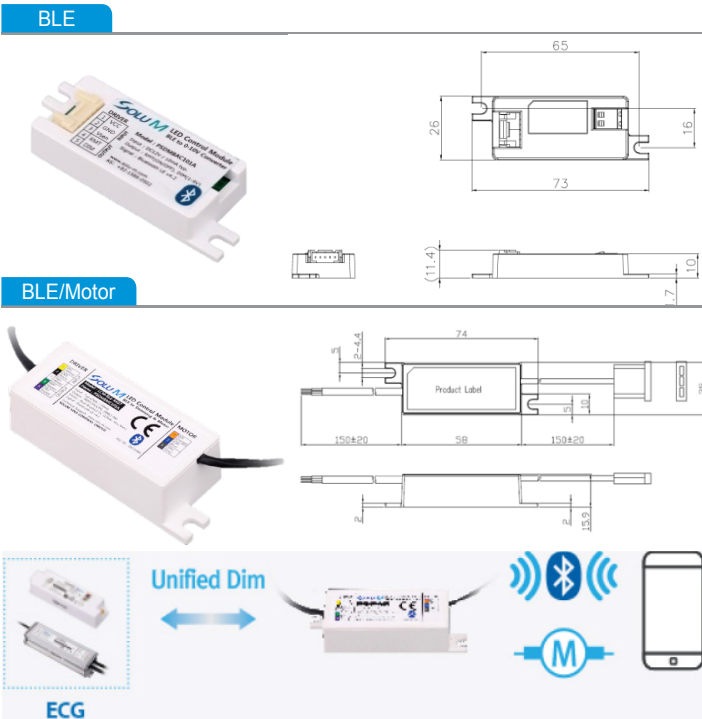
Model	Code	VIN [V]		IIN [mA]		Dimming		Function										Certificate	Case
		Min	Max	Min	Max	0-10	Auto Dim	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	LoRa	Motion	Photo		
LCM-DALI-A	PSDMDAD101A	10	16	15	20	10%		●	●	●								DALI Ed1.0 IEC62386-102 IEC62386-207	S1
LCM-DMX-A	PSDMXAD102A	10	16	25	35	10%		●	●		●							DMX512A ANSI E1.11-2008	S2

SMART Module_LCM-BLE-Smart Gen1

Lighting Connectivity Module. Wireless Control, Bluetooth Low Energy

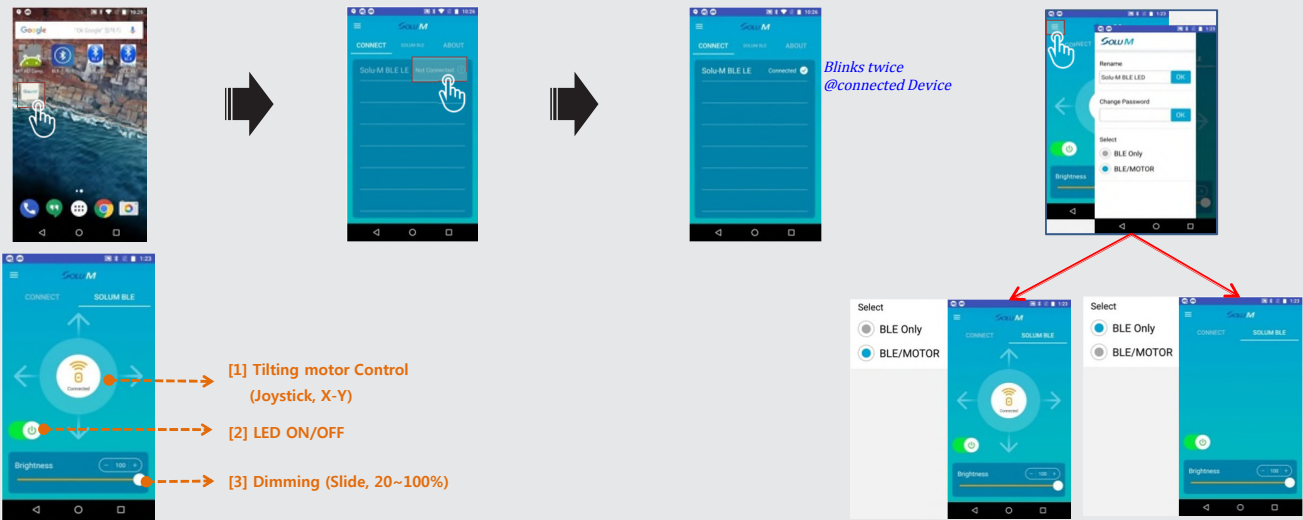
BLE / BLE+Motor

- Features**
 - ① Accordance With the Bluetooth Low Energy Standards
 - _ BLE Stack V4.2
 - ② Pre-decertified for worldwide radio frequency regulation
 - _ ETSI(Europe), IC (Canada), FCC(USA)
 - _ ARIB STD-T66, JATE(Japan)
 - ③ Dimming : 10~100%
 - ④ LED Off : Low Power Consumption(STBY Mode)
 - ⑤ Supports for Mobile App for Android & iOS
 - ⑥ Motor(X-Y Tilt) Control for aiming _only for BLE+Motor
 - _ X-Y tilt controls for aiming : Dual Brushed DC Motor
- Small Size**
 - BLE _S1_Dimension : 74(L) * 26(W) * 16(H)
 - BLE+Motor_S3_Dimension :
- Basic Function & ECG Interface** _ Based on Uni-Dim Control ECG
 - ① Vcc : 12Vdc input
 - ② GND
 - ③ NC_Vsen : Status Monitoring_Fault Detection
 - ④ RMT : LED OFF (STBY mode_ < 0.25W)
 - ⑤ Dim : 10~100% (Analog)



Mobile App

- Android & iOS : SOLUM BLE**
 - Intial password : 123456
 - Initial device name : Solu-M BLE LED



Model	Code	VIN [V]		IIN [mA]		Dimming		Function										Certificate	Case	
		Min	Max	Min	Max	0-10	Auto Dim	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	LoRa	Motion	Photo			Motor
L C M - B L E - A	PSDMBAD103A	10	16	15	20	20%		●					●						BLE v4.2	S2
LCM-BLE-MOT-A	PSDMBMC103A	10	16	15	20	20%		●					●					●	BLE v4.2	S3

SMART Module_LCM-IR-Smart Gen1

Lighting Connectivity Module. Wireless Control, IR&Remocon

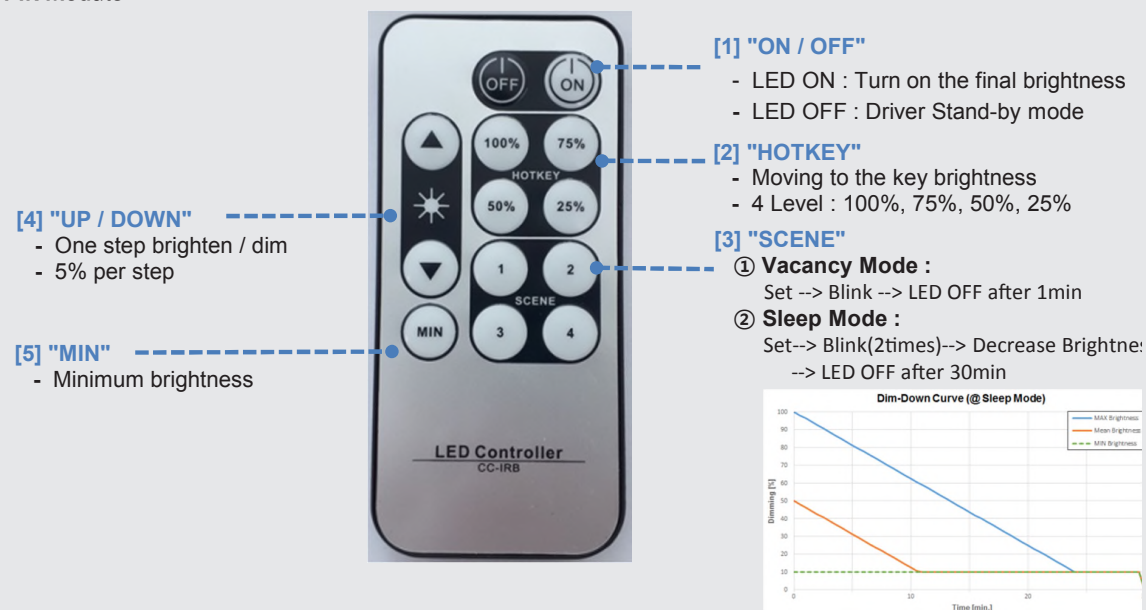
IR Remote control

- Features**
 - ① Accordance With IR Standards
 - _ Data format : NEC Protocol
 - _ Carrier Frequency : 38KHz
 - ② Pre-defined control data for Compatibility with IR remot-control
 - _ Use thr recommended IR Re,ote-Controller
 - _ IR Remote-Controller design with provided key code
 - ③ Dimming : 10~100%
 - ④ LED Off : Low Power Consumption(STBY Mode)
 - ⑤ Scene Mode Control
 - Vacancy Mode : Set --> Blink --> LED OFF after 1min
 - Sleep Mode : Set--> Blink(2times)--> Decrease Brightness(step) --> LED OFF after 30min
 - Memory Brightness: Maintain Last brightness When Re-lighting
- Small Size**
 - S1_Dimension : 73(L) * 26(W) * 10(H)
- Basic Function & ECG Interface _ Based on Uni-Dim Control ECG**
 - ① Vcc : 12Vdc input
 - ② GND
 - ③ NC_Vsen : Status Monitoring_Fault Detection
 - ④ RMT : LED OFF (STBY mode_ < 0.25W)
 - ⑤ Dim : 10~100% (Analog)



Remocon

Remocon for IR Module



Model	Code	VIN [V]		IIN [mA]		Dimming		Function										Certificate	Case	
		Min	Max	Min	Max	0-10	Auto Dim	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	LoRa	Motion	Photo			Motor
LCM-IRC-A	PSDMRAD104A	10	16	15	20	10%		●				●							NEC Format	S1
LCM-IRC-2Ch		10	16	15	20	10%		●				●							NEC Format	S1
Remocon																				

SMART Module_LSM-Sensor Control – Smart Gen1

Lighting Sensor Module. Wireless, ZIGBEE

Sensor control

- Features**
 - ① Various functions according to sensor connection
 - Type A : Auto ON/OFF According to day and night
 - Auto Dim Reconize a person
 - Type B : Auto on /OFF Reconize a person
 - Auto Dim accroding to ambient Brightnes
 - ② Can Connect Various Sensor
 - ③ Dimming : Auto Dim 10~100%
 - ④ LED Off
 - _Low Power Consumption(STBY Mode)
- Small Size**
 - S1_Dimension : 73(L) * 26(W) * 10(H)
- Basic Function & ECG Interface _ Based on Uni-Dim Control ECG**
 - ① Vcc : 12Vdc input
 - ② GND
 - ③ NC_Vsen : Status Monitoring_Fault Detection
 - ④ RMT : LED OFF (STBY mode_ < 0.25W)
 - ⑤ Dim : 10~100% (Analog)



Sensor Unit

Operating mode

Controller	Connected Sensor		Operating		Application
	ALS_Photo	PIR_Motion	Auto ON/OFF	Auto Dim	
Type "A"	•	•	On @Night Off @Day	100% @ Walker(Motion) 30% @ No Walker(Motion)	Street or Security Lighting
	•	X	On @Night Off @Day	100%	
Type "B"	X	•	On	100% @ Walker(Motion) 30% @ No Walker(Motion)	Indoor; Parking Lighting
	•	•	On @ Walker(Motion) Off @ No Walker(Motion)	Auto Dim(10~100%) according to Ambient Brightness	
Type "C"	•	X	On	Auto Dim(10~100%) according to Ambient Brightness	Street
	X	•	On @ Walker(Motion) Off @ No Walker(Motion)	100%	
Type "C"	X	X	On	ASTRO Dim (Time to Dim)	Street

Sensor Unit

1. Photo Sensor_LSM-PIR-A
2. Motion Sensor_LSM-ALS-A



Model	Code	VIN [V]		IIN [mA]		Dimming		Function										Certificate	Case
		Min	Max	Min	Max	0-10	Auto Dim	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	LoRa	Motion	Photo	Motor	
LSM-SCB-A1)	PSDMSAC101A	10	16	5	10	10%	•	•								•	•		S1
LSM-SCB-B1)	PSDMSEM102A	10	16	5	10	10%	•	•								•	•		S1
LSM-SCB-C1)	PSDMSEL103A	10	16	5	10	10%	•	•											S1

SMART Module_SLM-IR –Smart Gen2

Lighting Connectivity Module. Wireless Control, IR&Remocon

IR Remote control

■ Features

- ① USB Dongle Connection_UART
- ② Accordance With IR Standards
 - _ Data format : NEC Protocol
 - _ Carrier Frequency : 38KHz
- ③ Tunable : 0~100%_Warm/Cool
- ④ Dimming : 5~100%
- ⑤ LED Off : Low Power Consumption(STBY Mode)
- ⑥ Mode Control
 - Vacancy Mode : Set --> Blink --> LED OFF after 1min
 - Sleep Mode : Set --> Blink(2times)--> Decrease Brightness(step) --> LED OFF after 30min
 - Memory Brightness: Maintain Last brightness When Re-lighting

■ Small Size

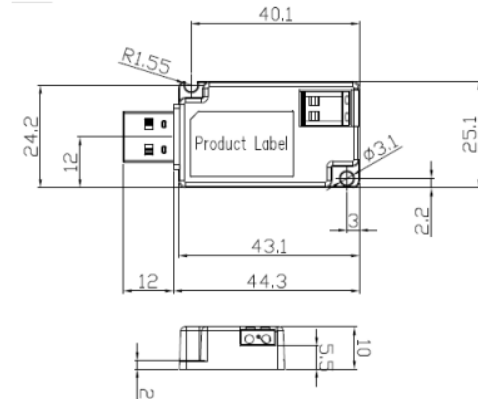
S3_Dimension : 43.1(L) * 25.1(W) * 10(H)

■ Basic Function & ECG Interface

- ① Vcc : 12Vdc input
- ② Ext
- ③ Prog
- ④ GND



Size S4



Remocon

■ Remocon for IRModule



[2] "Dim+ / Dim-"

- One step brighten / dim
- 5% per step

[3] "Color+ / Color -"

- Color Control
- 5% per step

[4] "HOTKEY_DIM"

- 3 Level : 10%, 50% 100%

[5] "HOTKEY_TUNABLE"

- Warm _ 1Ch 100%, 2Ch off
- Natural _ 1CH_50%, 2Ch 50%
- Cool _ 1ch _Off, 2Ch 100%

[1] "ON / OFF"

- LED ON : Turn on the final brightness
- LED OFF : Driver Stand-by mode

[6] "SCENE"

- ① Vacancy Mode :
Set --> Blink --> LED OFF after 1min
- ② Sleep Mode :
Set --> Blink(2times) --> Decrease Brightness --> LED OFF after 30min
- ③ Wakeup Mode :
Set --> Blink(3times) --> LED ON --> Increase Brightness --> Dim 100% after 15min

Model	Code	VIN [V]		IIN [mA]		Dimming		Function											Certificate	Case
		Min	Max	Min	Max	Min	Type	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	LoRa	Motion	Photo	Dim		
SLM-IR-01A	LMU12INN00/KGN	10	16	15	20	5%	Digit	●					●						NEC Format	S4

SMART Module_SLM-DALI2.0/DIM – Smart Gen2

Lighting Connectivity Module. Wired Control, DALI2.0/DIM

DALI 2.0

■ Features

- ① Accordance With the DALI standards
IEC62386-101, 102, 207, 209
- ② Basic Insulation _DALI Line
 - _Polarity Free & Overvoltage protect
- ③ Dimming : 5~100%
 - _Logarithmic Curve : Default setting
 - _Linear Curve : DALI Command 227(207part)
- ④ LED Off
 - _Low Power Consumption(STBY Mode)

■ Small Size

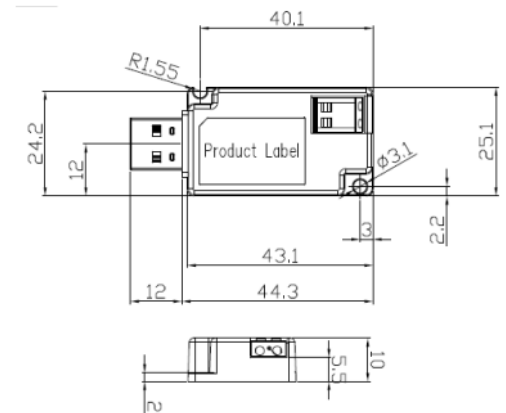
S4_Dimension : 43.1(L) * 25.1(W) * 10(H)

■ Basic Function & ECG Interface

- ① Vcc : 12Vdc input
- ② Ext
- ③ Prog
- ④ GND



Size S4



DIM & Tunable

■ Features

- ① 0~10V Analog control or PWM Control
- ② Dimming : 10~100% (Linear curve)
- ③ Tunable : 0~100%_Warm/Cool
- ④ LED Off
 - _Low Power Consumption(STBY Mode)

■ Small Size

S4_Dimension : 43.1(L) * 25.1(W) * 10(H)

■ Basic Function & ECG Interface

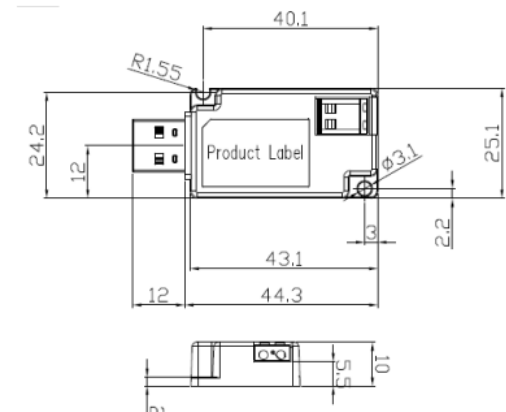
- ① Vcc : 12Vdc input
- ② Ext
- ③ Prog
- ④ GND

■ Signal Input

- ① 5V : External Vcc
- ② Dimming : Dim(4) & GND(2)
- ③ Tunable : Color(3) & GND(2)



Size S4



Model	Code	VIN [V]		IIN [mA]		Dimming		Function											Certificate	Case	
		Min	Max	Min	Max	Min	Type	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	LoRa	Motion	Photo	Motor			
SLM-DALI-01A	LMU11DNN00/KGN	10	16	15	20	5%	DALI	●	●	●											S4
SLM-DIM-01A	LMU11APN00/KGN	10	16	25	35	5%	0-10	●													S4
SLM-DIM-01B	LMU11PNN00/KGN	10	16	25	35	5%	PWM	●													S4

SMART Module_SLM-DMX & RS485 – Smart Gen2

Lighting Connectivity Module. Wired Control, DMX512 & RS485

DMX

■ Features

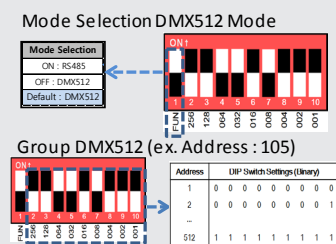
- ① Accordance With the DMX standards
_ DMX512 Standards (DMX512A)
- ② Set DMX address with Dip Switch
_ Channel : 1 ~ 512
- ③ Dimming : 5~100% (256steps), Linear curve
- ④ LED Off _Low Power Consumption(STBY Mode)

■ Small Size

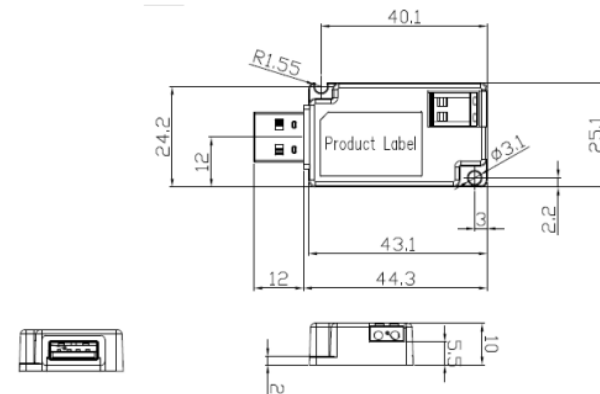
S4_Dimension : 43.1(L) * 25.1(W) * 10(H)

■ Basic Function & ECG Interface

- ① Vcc : 12Vdc input
- ② Ext
- ③ Prog
- ④ GND



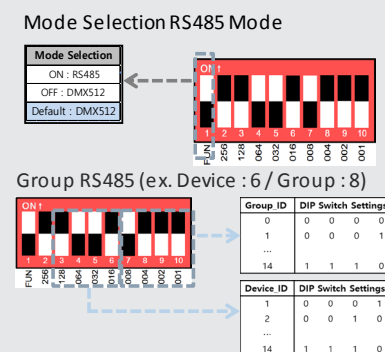
Size S4



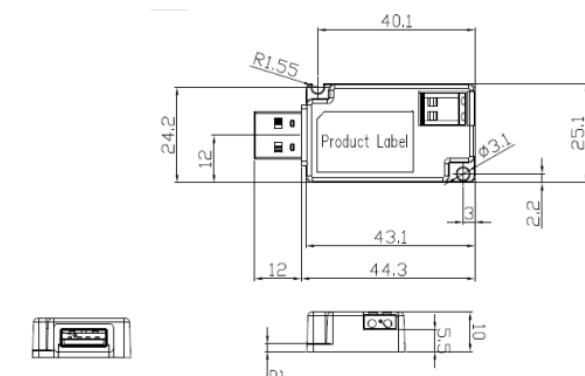
RS485

■ Features

- ① SoluM RS485 Protocol
- ② Set RS485 device and group ID with DIP Switch
Device ID : 1~ 14
Group ID : 0~14
- ③ Dimming : 5~100%
- ④ Changeable color temperature : 0~100% (Warm, Cool)
- ⑤ LED Off _Low Power Consumption(STBY Mode)



Size S4



Model	Code	VIN [V]		IIN [mA]		Dimming		Function											Certificate	Case	
		Min	Max	Min	Max	0-10	Auto Dim	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	LoRa	Motion	Photo	Motor			
SLM-DMX-01A	LMU11XRN00/KGN	10	16	15	20	5%		●	●		●										S4

SMART Module_SLM-BLE MESH – Smart Gen2

Lighting Connectivity Module. Wireless Control, Bluetooth Low Energy

BLE MESH

■ Features

- ① USB Dongle Connection_UART
- ② Accordance with the Bluetooth Low Energy Standards
_ BLE MESH 1.0
- ③ Tunable : 0~100%_Warm/Cool
- ④ Dimming : 5~100%
- ⑤ LED Off : Low Power Consumption(STBY Mode)
- ⑥ Supports for Mobile App for Android & iOS

■ Small Size

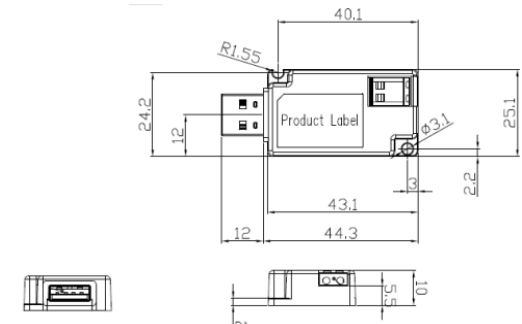
S4_Dimension : 43.1(L) * 25.1(W) * 10(H)

■ Basic Function & ECG Interface

- ① Vcc : 12Vdc input
- ② Ext
- ③ Prog
- ④ GND

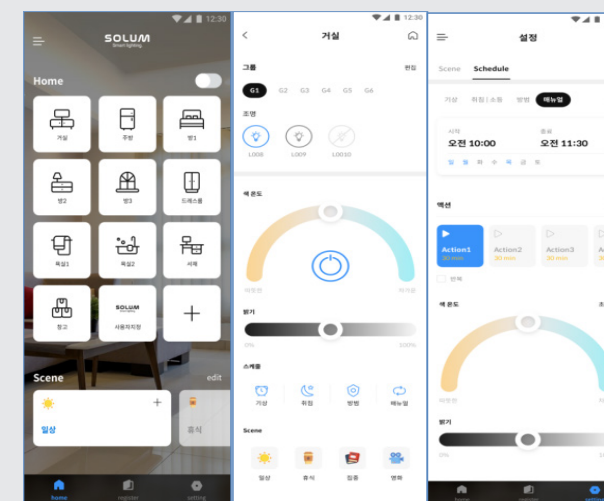


Size S4

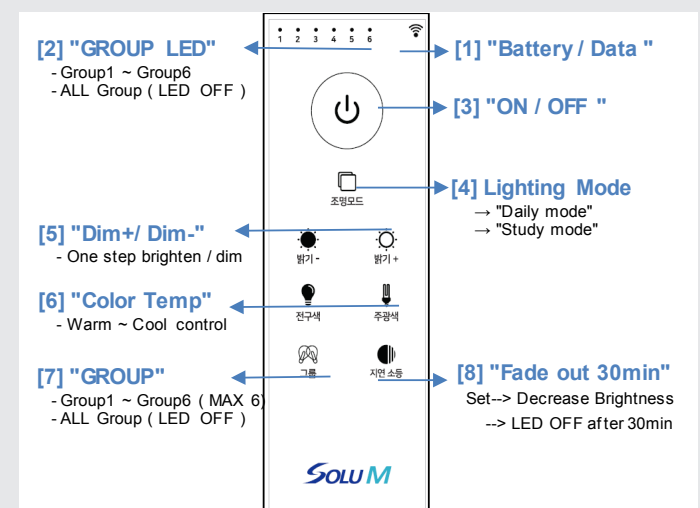


UI / SI

■ Android : SoluM Smart Light



■ Remote Controller _ BLE MESH



Model	Code	VIN [V]		IIN [mA]		Dimming		Function											Certificate	Case
		Min	Max	Min	Max	Min	Type	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	LoRa	Motion	Photo	Motor		
SLM-BLE-01A	LMU12BNN00/KGN	10	16	15	20	5%	BLE MESH	●					●						BLE Mesh	S4
SLR-BLE-01A	LRBLEW002NH/WGN	2.4	3.2	15	20		BLE MESH						●						BLE Mesh	

SMART Module_SLM-WIFI – Smart Gen2

Lighting Connectivity Module, Wireless Control, Smarthings standards

WiFi_Smarthings

■ Features

- ① USB Dongle Connection_UART
- ② Accordance with the Smarthings Standards
- ③ Accordance with Wi-Fi standard
- ④ Tunable : 0~100%_Warm/Cool
- ⑤ Dimming : 5~100%
- ⑥ LED Off : Low Power Consumption(STBY Mode)
- ⑦ Supports for Smarthings for Android & iOS

■ Small Size

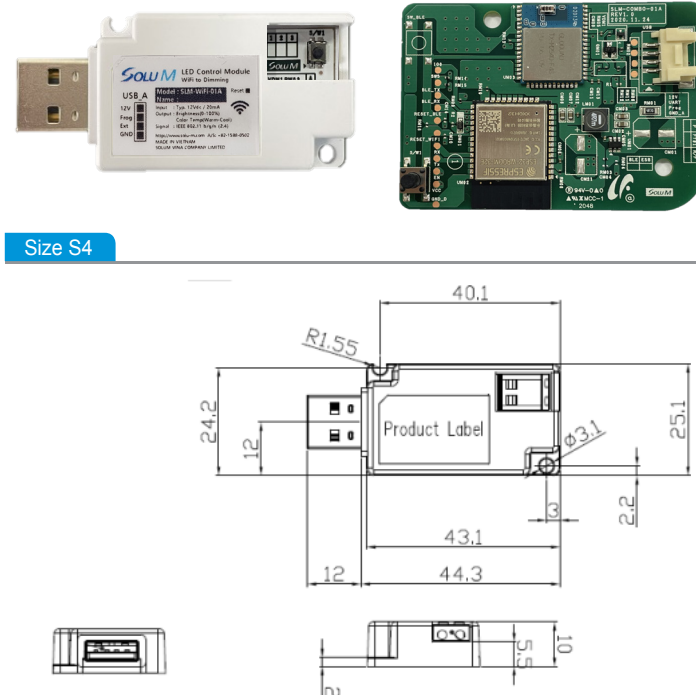
S4_Dimension : 43.1(L) * 25.1(W) * 10(H)

■ Basic Function & ECG Interface

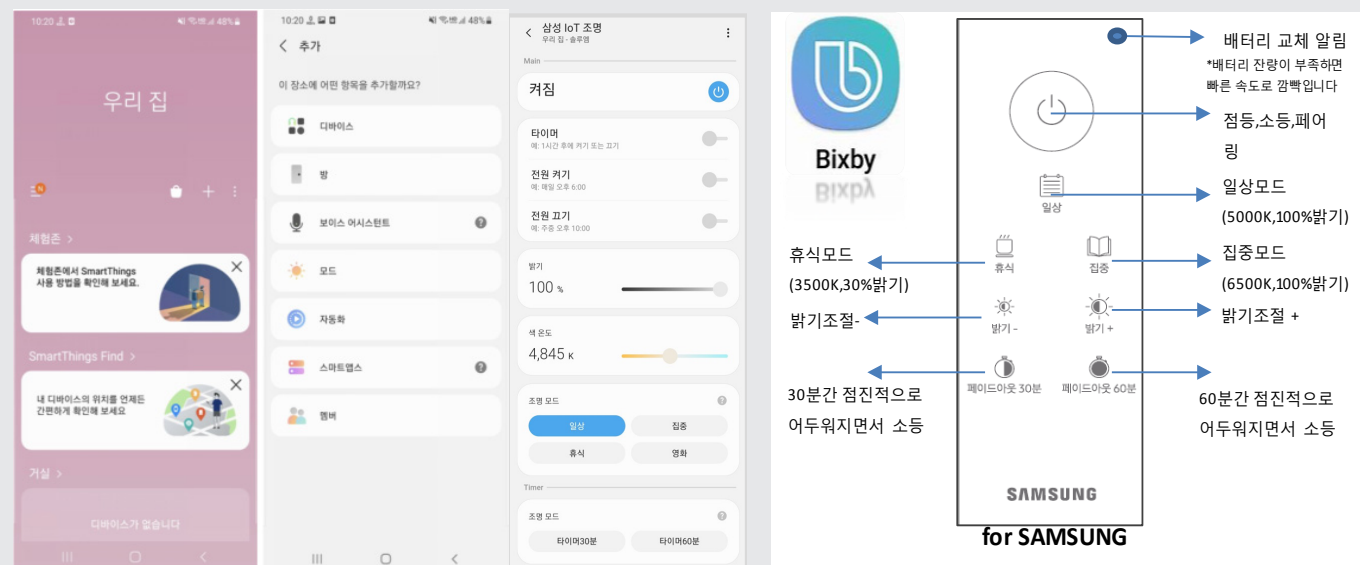
- ① Vcc : 12Vdc input
- ② Ext
- ③ Prog
- ④ GND

■ Android & iOS :

Initial device name : Smarthings



UI / SI

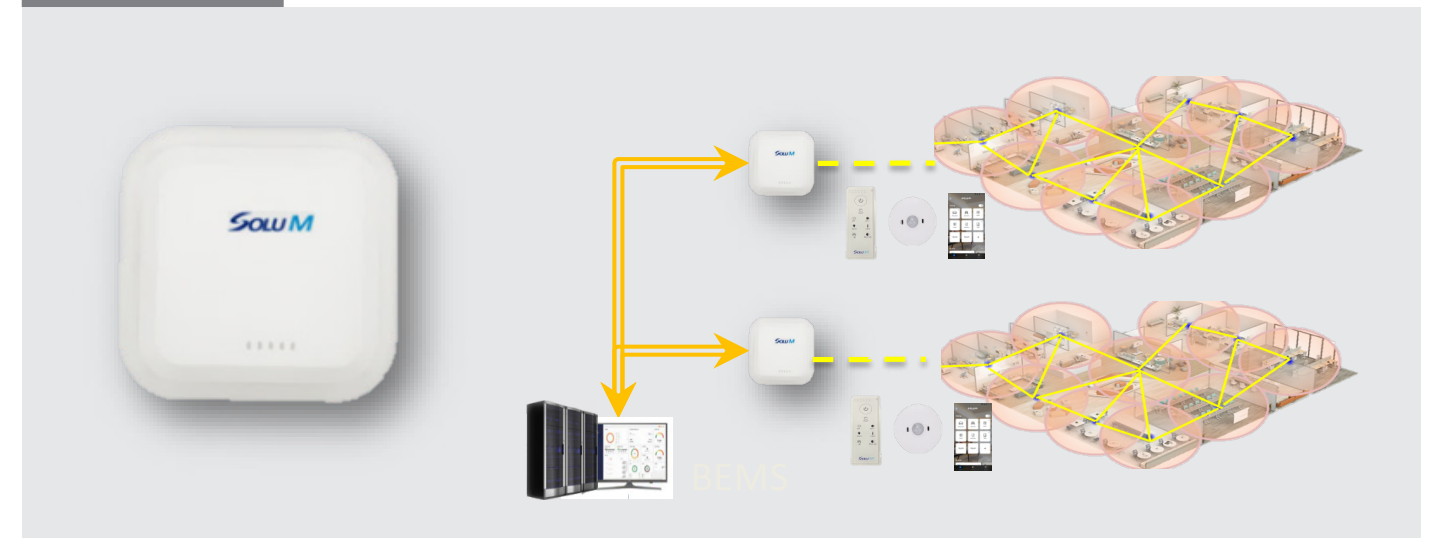


Model	Code	VIN [V]		IIN [mA]		Dimming		Function										Certificate	Case	
		Min	Max	Min	Max	Min	Type	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	WiFi	LoRa	Motion			Photo
SLM-WIFI-01A	LMU12WNN00/KGN	10	16	150	200	5%		●							●				Smartthings	S4
SLR-ESB-01A	LRESBW001NHWGN	2.4	3.2	15	20														ESB	

GATEWAY_Smart Gen2

B-IoT gateway for lighting control

Construction



Features

- Accordance with the IEEE802 standard
- Accordance with the Bluetooth Low Energy standard
※ BLE MESH 1.0
- Support local group control through remote control
- Central control through b-IoT Server

SPEC

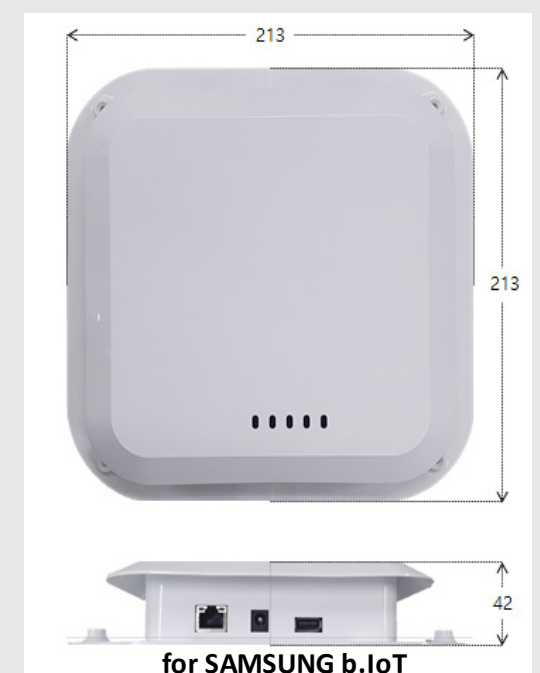
Technical Specifications

Supply	5Vdc / 2000mA / 10W typ
Data Input	IEEE802 LAN Standards
Data Output	Ethernet (10/100 Mbps)
Lighting Control	MAX. 200EA
Remote control group	MAX. 6 Group
Temperature	0°C ~ 40°C
Protective type	IP20
Weight	400g
Enclosures	Plastic (ABS)
Dimension	213(L) x 213(W) x 42(H)

RF Specifications

2.4GHz RF Antenna Type	Internal Antenna (Dielectric Chip)
Frequency range	2402MHz ~ 2480MHz
Antenna Gain	2.8dBi

Dimensions[mm]

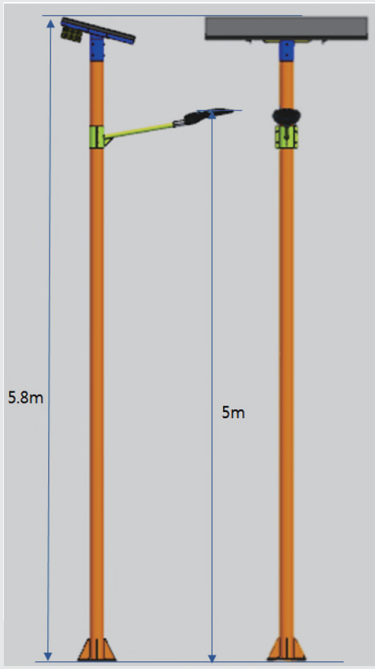


Model	Code	VIN [V]		IIN [mA]		Dimming		Function										Certificate	Case
		Min	Max	Min	Max	0-10	Auto Dim	LED Off	Fault Det	DALI	DMX	IR	BLE	Zigbee	LoRa	Motion	Photo		
SLG-GATEWAY-01A	LLMN41BNN00/KGN	4.8	5.5	500	2000								●						

Solar Street Lighting System

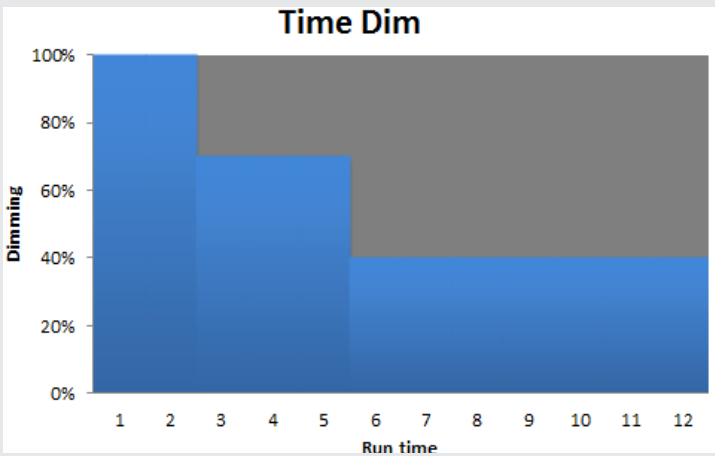
Off Grid Solar Street Lighting

Construction



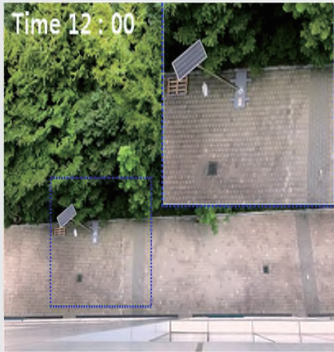
Features

- **Automatically Charging / Lighting**
- **Time Dim** _ Change Brightness over Run Tim
- **Intelligent Power Control** _Load Controlled by Battery's Capacity
- **Protection** _Auto Recovery
 - Over & Under Temperature Protection
 - Over Charge / Discharge Protection
 - Over Voltage & Current Protection
 - Under voltage Protection
 - LED Open & Short Protection



SPEC

List	Spec			Unit	Remark
	Min	Typ	Max		
Total Power	757.21	786.05	-	W	
Sunless Days	2	3.5	-	Days	Intelligent Power Control
Operating Tem	0°C		45°C	°C	Charge
	-20°C		60°C	°C	Discharge
Humidity			100%	°C	
Water proof	IP65				
Light	Luminous	6000		Lm	
	Color Temp	5200	5900	K	
	Eff	150	153	Lm/W	
Solar	Power	150	170	W	
	Cell Eff	20		%	
	Capacity	35.45	36.8	Ah	24.6Vdc
Battery	Cycle Life	1000		Cycle	> 85%_cell
		2000		Cycle	> 78%_cell



MEMO



본 사

본 사

경기도 용인시 기흥구 구성로 357, 용인테크노밸리 A동 4,5,6층 TEL : 1588 - 0502

영업 + 82-(0)31-8006-0921

개발 + 82-(0)31-8006-0957

생산거점

베트남 법인

Plot B3, Ba Thien II Industrial Park, Thien Ke Ward, Binh Xuyen District, Vinh Phuc Province, Vietnam.

동관법인

Building 2/4/6, No.35, Tongzhen Road, Tongsha Science and Technology Industrial Park, Dongcheng District, Dongguan City, Guangdong Province, 523127, People's Republic of China (广东省东莞市城区同沙科技工业园同振路35号2/4/6栋523127) TEL : 0769 - 8330 - 6789

인도법인

Plot No 15, Sector 90, Noida, Gautam Buddha Nagar, Uttar Pradesh, India, 201305
TEL : +91-80-6177-0988

멕시코 법인

Privada San Quintin, #9437, Colonia Parque Industrial Pacifico, Tijuana Baja California, C.P. 22643, Mexico
인사 : +52-664476759
영업 : +52-664-476-7351

판매법인 및 판매사무소

유럽법인

Hillsite Am Kronberger Hang 865824Schwalbach Ts, Germany
Tel : +49-6196-780-740

미국법인

1551 McCarthy Blvd, Suite 109 Milpitas, Ca 95035, USA
Tel : +1-408-618-5622

뉴저지 사무소

65 Challenger Road, Suite 220 Ridgefield Park, New Jersey 07660, USA
TEL. +1-201-210-8372

대만사무소

3F, No.122, Xinhu 3rd Rd., Neihu District, Taipei
Tel : +886-2-2793-1025~6

북경사무소

北京朝阳区望京园603号楼18层2117

일본사무소

SoluM CO., LTD Japan Representative Office
MY Mita Building 5-29-17 Shiba, Minato-ku, Tokyo 108-0014, Japan
Tel : +81-3-6459-4931

R&D 센터

인도

SoluM Technologies India Private Limited Level 7, Mfar Greenheart, Manyata Tech Park, Hebbal Outer Ring Road, Bangalore - 560045, India
Tel : +91-80-6720-5555